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MODERN INDIA

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Edited by

SIR JOHN CUMMING
K.C.I.E., C.S.I.

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PREFACE

MORE than fifty years ago Sir Richard Temple published his *India in 1880*. The survey, he wrote, 'will be as exact and comprehensive as can be obtained in the limited space, and will be nothing more than a survey'. The limitations of the present survey could not be expressed in more precise terms; but whereas Sir Richard Temple was an encyclopaedist in Indian subjects with an almost unique range of personal experience, the task in the present instance has been entrusted to no fewer than seventeen writers. The qualifications common to each contributor are an affection for India and her peoples, and a peculiar and expert knowledge of his particular subject.

This symposium is not a history of India: it does not profess to supply solutions of the problems of current politics, nor does it forecast the future. But it does strive to set forth some important elements of the Indian situation by means of a dispassionate presentation of things as they are, together with some account of the causes which have made them what they are. It is hoped that *Modern India* will be of service to men of good will who are seeking a path through what often seems to be the impenetrable jungle of Indian controversies.

The Editor desires to express his cordial appreciation of the co-operative spirit of all the contributors, and his sense of gratitude to all those who have assisted him in the preparation of this book; especially Sir John Kerr, K.C.S.I., K.C.I.E., Mr. F. H. Brown, C.I.E., and the Oxford University Press.

15th September, 1931.

NOTE REGARDING CURRENCY

Prior to 1893, when the Indian Mints were closed to the free coinage of silver, the value of the rupee was entirely determined by the price of silver, and there were serious fluctuations. In 1899 the exchange value of the rupee was fixed at 1*s.* 4*d.*, at which figure it remained till 1917, when it rose rapidly till 1920. The exchange value was fixed in that year at 2*s.* gold, but this ratio could not be maintained; and the exchange value fell until eventually in 1927 the ratio to the gold pound was fixed at 1*s.* 6*d.* after a Royal Commission. The equivalents at this rate are given below:

Indian Currency Rupees.	*British Currency Sterling.*			*American Currency Dollars. (Gold Parity)*
	£	*s.*	*d.*	
1		1	6	0·365
10		15	0	3·65
13 33	1	0	0	4·866
1,000	75	0	0	365
100,000 (one lakh)	7,500	0	0	36,500
1,000,000 (one million)	75,000	0	0	365,000
10,000,000 (one crore)	750,000	0	0	3,650,000

Great Britain abandoned the gold standard on 21 September, 1931, but the rupee remained linked to sterling.

NOTE ON THE SPELLING OF GEOGRAPHICAL NAMES

The style is that adopted by the *Imperial Gazetteer* (Oxford, 1909) and the Permanent Committee on Geographical Names of the Royal Geographical Society in their *List* of May 1924.

Chapter I

THE COUNTRY, PEOPLES, LANGUAGES, AND CREEDS

By SIR HARCOURT BUTLER, G.C.S.I., G.C.I.E., D.LITT., D.C.L.

[Sir Harcourt Butler was a member of the Indian Civil Service for nearly forty years. He was Secretary to the great Famine Commission of 1900–1, which laid down principles of famine policy which have endured to the present day. In 1910 he was selected to organize a new Department of Education, as a Member of the Viceroy's Council. From 1915 to 1927 he governed successively Burma, the United Provinces, and again Burma. His last important service for India was as Chairman of a Committee which inquired into the position of the Indian States. After his retirement he became Chairman of the School of Oriental Studies in London.]

THE activity of man in all ages and places is largely determined by his physical environment. The past of India strikingly illustrates the close relation between geography and history. The varied geographical features, which distinguish the regions and subdivisions of India, account largely for the part that they have played at different periods of her political history, and in the development of her culture and ethnography. Conditions of climate and cultivation, natural lines of communication, density and ethnic character of the population have profoundly influenced political and economic growth. Judged by her extent, the variety of her physical conditions, and her independent articulation, India can only be regarded as a sub-continent of Asia.

The determining factors of her environment are the mountain ranges, the river systems, the climates, and the rainfall. The Himalayan range, about fifteen hundred miles in length and about a hundred miles in depth, is

an effective barrier against invasion or interference from the north. The Himalaya (abode of snow) contains in Everest, K_2, and Kinchinjunga, the three highest measured mountains of the world. We know that from early times Chinese and other adventurous travellers have found their way over the difficult passes and through the valleys of this mountain system, but their efforts have not opened a path for the passage of armed forces. On the north, India is still secure against military attack. This can only be said of the north-east with considerable qualification, for in the past China has overrun Nepal and Tibet, and the British have sent an expedition to Lhasa. It cannot be said at all of the North-West Frontier, which through the ages has admitted in successive waves invading armies, Aryans, Persians, Greeks, Scythians, Huns, Tartars, and Mongols, who have conquered and occupied large tracts of India. In fact, India is dominated by her north-west frontier, which is vulnerable on two lines, through the North-West Frontier province and through Baluchistan. Four passes lead from Afghanistan into the North-West Frontier Province, important in the following order, the Khyber, the Kurram, the Tochi, and the Gomal. Between the North-West Frontier Province and the Afghan border is a neutral zone of hilly country occupied by warlike Pathan tribes, who have a back-door and means of escape into Afghanistan. Baluchistan is occupied by the British right up to the Afghan border and the open plain of Kandahar. The other important ranges of hills are the Aravalli Hills, which run through Rajputana and roughly bound on the east the desert, or dry zone, of Baluchistan, Sind, and Rajputana; the Vindya Mountains which divide the southern plateau from the Indo-Gangetic plain; and the series of hills running north and south which separate Burma from India and China. These hills are usually

covered by forest of greater or lesser density, the vegetation being thickest on the northern slopes, which are protected from the fiercest scorchings of the sun. They have from time immemorial afforded shelter and refuge to the shy aboriginal tribes, who with true instinct see destruction in contact with people more advanced than themselves.

Three great snow-fed rivers rise in the Himalaya, the Indus, the Ganges, and the Brahmaputra. The Indus, with its five great tributaries, from which the Punjab (five waters) derives its name, the Jhelum, the Chenāb, the Ravi, the Beās, and the Sutlej, rises in the east of the Himalaya and flows after a westerly course of seventeen hundred miles into the Arabian Sea. The Brahmaputra rises in the west of the Himalaya and flows in an easterly direction as the Tsan-po down through Tibet, Assam, and Eastern Bengal, where it becomes the Brahmaputra (the son of Brahma), and discharges its floods after a course of sixteen hundred and eighty miles into the Bay of Bengal. Both these rivers rise in the hinder parts of the Himalayan range. The Ganges, with a course of fifteen hundred miles, drains its southern slopes, and with its tributaries the Jumna, the Gogra, the Gandak, the Chambal, and the Son enters the Bay of Bengal, like the Brahmaputra, through extensive deltas with a multitude of channels. These are always changing as floods come down, or obstructions arise; islands are formed, and the land is constantly gaining accretions, which come under cultivation, continuous or temporary as the case may be. The Indus in the west also steadily increases the land, but it has not the tropical forests and moist areas which mark the deltas of the Ganges and the Brahmaputra. The Indus waters the Punjab and Sind; the Ganges, the United Provinces, Bihar, and Western Bengal; the Brahmaputra, Assam and

Eastern Bengal. In Southern India the flow of the rivers is generally from west to east, the more important being the Mahanadi, the Godavari, the Kistna, and the Cauvery. The Narbada and the Tapti are the two exceptions, flowing through deep, rocky cuttings from east to west. The deltas of the Godavari, the Kistna, and the Cauvery are famous for their fertile rice fields. The larger rivers used, in the old days, to be navigated for considerable distances. The railways now carry the traffic, and the water is drained off by canals for irrigation. The principal historic cities of India have grown up on the banks of rivers in the populous inland areas. The British in founding Bombay, Calcutta, and Madras naturally attached first importance to access from the sea.

The climate varies greatly with the rainfall and proximity to the coast. Leaving aside the almost rainless deserts of the north-west, India falls into two main parts, the Indo-Gangetic plain to the north and the southern peninsula or Deccan. The Indo-Gangetic plain was at one time the bed of a sea. It is now a wide, fertile, and populous alluvial plain growing all kinds of crops, cereals, millets, pulses, oil-seeds, tobacco, spices, hemp, and sugar-cane. In the extreme west by Delhi the soil is light, the rainfall twenty to thirty inches, the trees few; in the United Provinces the rainfall is thirty to forty inches and trees are a feature of the landscape; in Bihar and Bengal moisture increases the nearer one approaches the sea, the rainfall is fifty to sixty inches and the vegetation is sub-tropical, plantains and bamboos, palm-trees and heavy creepers. The delta of the Ganges and the Brahmaputra forms a vast rice plain, and here the world's monopoly of jute is grown. Northern India has a real cold season from October till March. The mornings and the evenings are cold and there is freshness in the air, although the sun at

noon is hot. The cold increases as one travels north-westward, and at Peshawar one wants thick furs morning and evening. The coldest months are November and December. From March the heat increases, dry hot winds blow and sandstorms are common. By the end of May the heat is almost unbearable, reaching 125° F. in the shade. The land is as iron and the sky as brass. Agricultural operations are suspended. At last the monsoon breaks, usually in torrents of rain, about the middle of June. The parched land in a few hours becomes green, water stands in the fields, the earth is soaked, ploughing commences busily, and all nature breathes once more. There is no relief in the world greater than that which follows the breaking of the rains. The great heat sucks in the south-west trade winds and these break upon the mountains and descend in life-giving showers.

The southern peninsula, which was once connected by land with Africa, is moister than the Indo-Gangetic plain, and the moisture increases as one goes farther south. Central India has a dry hot weather and a marked cold season. As one nears the extreme south, the air is more heavily laden and the variations in temperature are less marked. Indeed, in the south the months of December and January are the months of heaviest rainfall. The most southerly point of India is only eight degrees north of the equator. The vegetation is tropical, the heat is enervating, but conditions of life are easier and healthier than in the north. In both north and south the prosperity of the people depends on the amount and distribution of the rainfall. At the extreme south the rainfall is about a hundred inches. The centre of the peninsula is a plateau sloping to the west, with hills known as the Western Ghats dropping sheer into the coastal fringe. On the east the hills are lower, and in many cases forest or cultivation

stretches to the sea-shore. The Nilgiri (Blue Mountain) Hills on the south-west have a healthy and agreeable climate for Europeans and are one of the great hunting grounds of India. Big game abounds also in the forests of Central India and the Himalayan foot-hills, and in the low-lying tract at the foot of the eastern Himalayan ranges known as the *terai*.

'The Indian Empire', writes Professor Rapson, 'is the abode of a vast collection of peoples who differ from one another in physical characteristics, in language and in culture more widely than the peoples of Europe.' In them are to be found representatives of the three primary ethnographical divisions of mankind, the Caucasian or white with its subdivisions of blond and dark, the Mongolian or yellow, the Ethiopian or black, the last being confined to people of the Andaman Islands. India is in fact one of the greatest ethnographical museums in the world. Invaders after invaders seem to have settled in the sub-continent, in some cases maintaining the purity of their race, in others inter-marrying freely with the people of the country, who often preceded them in invasion. They were impelled either by the desire of enjoying the fertility of India, or by the necessity of leaving tracts that had suffered physical deterioration, such as the dessication which is known to have reduced large tracts of Asia to desert within historic time. Linguistic and anthropometrical research has discovered the existence of seven different ethnographical types in India.

1. Dravidian, now found in the Madras Presidency and Central India.
2. Indo-Aryan, now found in Kashmir and the Western Punjab as far as the Indus.
3. Turko-Iranian, now found west of the Indus, the North-West Frontier Province.

4. Scytho-Dravidian, now found in Baluchistan and the Bombay Presidency.
5. Aryo-Dravidian, now found in the South-East Punjab, the United Provinces and Bihar.
6. Mongoloid, now found in Burma, Assam, and a belt of sub-Himalayan country, and also in Nepal and Bhutan.
7. Mongolo-Dravidian, now found in Bengal and Orissa, and known as the Bengali type.

For practical purposes one may confine one's attention to the three main groups, Indo-Aryan, Dravidian, and Mongoloid.

Some three thousand five hundred years ago, the Aryans, a people of European descent, made their way into north-western India. Scholars conclude that they migrated in mass with their families and flocks. By degrees they overran the greater part of Northern India and eventually crossed the Vindhyas into the southern peninsula. They found in possession a darker race, of stunted growth in comparison with themselves, namely the Dravidians. Whether the Dravidians were aboriginal or earlier invaders of India is as yet unsettled. The Indo-Aryans had apparently stronger physique, higher culture, and a superior language. Their oldest books have affinities with Greek and Iranian thought. They are the progenitors of the high-caste Hindus of to-day, and in time they developed the social and religious institutions and ideas which go to make up modern Hinduism. The Mongoloids resemble the Chinese with yellowish skins and slanting eyes. How these races intermixed and what were the stages of their intermixture, we can conjecture but never know. Leaving origins aside, we are faced with a mass of peoples of varying degrees of culture and language, of habit and custom, such as is found nowhere else under one system of government.

'Four of the great families of human speech,' says Professor Rapson, 'the Austric, the Tibeto-Chinese, the Dravidian, and the Indo-European—are directly represented among the living languages of India, of which no fewer than two hundred and twenty are recorded in the Census Report for 1911; while a fifth great family, the Semitic, which has been introduced by Muhammadan conquerors in historical times, has through the medium of Arabic and Persian greatly modified some of the Indian vernaculars. The Austric, Tibeto-Chinese, and Indo-European families are widely spread elsewhere over the face of the earth. The Dravidian has not been traced with absolute certainty beyond the limits of the Indian Empire; but there is evidence which seems to indicate that it was introduced into India in pre-historic times.'[1]

One of the curiosities of the linguistic survey, with which Sir George Grierson's name will always be associated, is that Brahui, a Dravidian language, is still found in Baluchistan. On the other hand, there is no Dravidian influence of any kind in the Punjab. The chief Dravidian languages, Telugu, Tamil, Kanarese, and Malayalam, have their home in the Madras Presidency, where English is rapidly becoming a *lingua franca*. The other predominant languages are Bengali, Western Hindi, Bihari, Eastern Hindi, Marathi, Punjabi, Rajasthani, Gujarati, and Orya. The people who speak Western and Eastern Hindi can understand, though with difficulty, one another's speech, so that in all there are twelve main languages in India, which are as distinct as the languages of Europe. 'The present population', says Mr. W. Crooke, 'thus represents the flotsam and jetsam collected from many streams of ethnical movement, and as a result of this there is a bewildering variety of language and dialect.'[2] Language is not, of course, a test of race, but it sometimes gives a clue to tribal migrations.

[1] *Cambridge History of India*, vol. i, p. 37. Cambridge University Press, 1922.

[2] W. Crooke, *The Native Races of Northern India*. Constable, 1907.

The main lines of cleavage in modern India are not so much racial or linguistic as religious. The Hindus who observe caste number about one hundred and seventy millions, the Muslims eighty millions, Hindus not in caste seventy-five millions, Buddhists, Christians, Sikhs, Jains, and Parsis twenty-four millions. The Buddhists are found in Burma, which, it is proposed, should be separated from India. The early Aryan invaders worshipped bright deities personifying natural elements and forces, the gods of water, of fire, of the wind, of rain, of the sun, etc., who enjoyed eating and drinking and were propitiated with sacrifices. At that time there were different social classes, but there is little real evidence of the existence of caste. That grew up at some later period under the sacerdotal influence of Brahmins. At some later period also there appeared the doctrine of the Hindu Trinity, Brahma the Creator, Vishnu the Preserver, and Siva the Destroyer, and the doctrine of metempsychosis or transmigration of souls according to the law of Karma (lit. act, work), that one's future existence and status depends on one's merits and demerits in the present existence. Long sojourn in India and experience of its climate, its tremendous physical forces, famine and pestilence, plunged the successors of the Aryans into the pessimism which has saturated Hindu thought. Matter is evil, the world is Maya or the great illusion, and happiness is to be sought by limiting desire, by asceticism, by retirement from the world. By subduing the senses and by meditation alone can one obtain real understanding and mental peace, and by purification through many existences alone can one attain to the final beatification of absorption in the one reality, the eternal, universal, and unconditioned mind. In essence pantheistic, in form Hinduism or Brahminism, is polytheistic. Its contact with and assimilation of many

indigenous beliefs has led Brahminism to the recognition of a multitude of godlings and forms of worship. Its subtle restless speculations have embraced many schools of philosophy, idealistic and realistic, but in its social applications it has concentrated on the definite and living institution of caste.

According to the ancient digest of law contained in the book of Manu, Indian society is divided into four main castes: (1) the Brahmin or priestly caste, (2) the Kshatriya or warrior caste, (3) the Vaisya or trading caste, and (4) the Sudra or serving caste. The first three of these castes are twice born and wear the sacred thread, which is conferred on them with regulated ceremonial, when they are fitted by age to take part in the full ritual observances. The facts of modern social life do not conform to the simple classification of Manu. The origin of caste is lost in antiquity. The Sanskrit word for caste, *varna*, seems to imply a colour distinction. Whether it should be translated as class or caste is still a question disputed by eminent scholars. The outstanding fact to-day is that Hindu society is divided into hundreds and indeed thousands of separate castes or sub-castes which cannot inter-marry or feed with one another. Hindu society is stratified horizontally, not vertically. A man or woman born into a caste or sub-caste cannot escape from the conditions of his birth. There is no social ladder for him. As he is born so will he die; he cannot marry or eat outside his caste or sub-caste nor can he marry within his family. He is thus endogamous and exogamous. His social life is limited for the whole of his existence by the fact of his birth. In another existence he may be born into another caste or sub-caste but that does not affect his position now and here. The institution of caste is accepted as divine by all orthodox Hindus and it gives a predominant position to the highest

or Brahmin caste. Brahmins must be fed or paid on all ceremonial occasions; they must be treated with the greatest respect; the killing of a Brahmin is the one unforgivable sin to be expiated by long penances through many existences. The Brahmins have thoroughly secured their position with religious sanctions, and this position is still accepted by the mass of Hindus. Caste seems to be based on colour and race and also on occupation. For good or for evil, the Brahmin is supreme. The institution of caste appears to be fixed and permanent. It adapts itself to modern conditions in many ways, but in marriage or the preservation of the purity of stock and in all those things that make for the purity of ritual caste seems to be as strong and persistent as it has ever been. To Western eyes this may seem extraordinary, but it is apparently in close conformity with the genius of Hindu society and its unassailable conservatism which prefers the preservation of social order to the advancement of the individual or mankind. On the other hand, it must be remembered that caste has advantages as well as disadvantages. The Abbé Dubois thought the former were greater than the latter, and that caste had saved the Hindus from relapsing, like other peoples, into barbarism. The orthodox Hindu regards it as the only bulwark left against the revolutionary or communistic movements which shake society in the West.

Outside caste are the masses of the depressed classes to whom Brahminism refuses admission to social Hindu life. In Southern India these are so numerous and powerful that the Non-Brahmins have been able to secure a majority in the Madras Legislative Council. The future of these classes is one of the great problems of the time. Some have embraced Christianity in order to escape from their intolerable position. Some again have embraced Islam in their

searching for social status. Under Christianity and Islam the depressed classes can obtain a recognition which Brahminism denies them at present. But Hindu reformers have realized that their importance is steadily increasing and it is possible that Brahminism, which in some ways is one of the most adaptable religions of the world, will in the end give them a place in its social system. At present in most parts of India, the orthodox Hindus deny them access to their schools and temples and demand that they shall live apart and not contaminate them by their proximity or intercourse.

In the history of Hinduism there have been many revolts or revivals animated by the desire to escape from the trammels of Brahminic priestly influence and the social restrictions of caste. The earliest of these was Buddhism. The latest, or one of the latest, was Sikhism. In the sixth century before Christ a prince of Northern India, by name Gautama, impressed by the all-pervading pain and suffering of his fellow men, renounced the world and became the Buddha or supremely enlightened one. He instituted a monastic order free from caste and preached a middle way between self-indulgence and self-mortification, condemned idolatry, sacrifices, and metaphysical speculation. He preserved the doctrine of transmigration through successive existences according to the law of Karma, or reaping as one has sown, until one reaches the final end of things—*nirvana*—or absorption in ultimate rest or annihilation. There were, he preached, four noble truths to be reached by eight noble paths of moral life; and the commandments were five directed against the destruction of life, stealing, unchastity, untruthfulness, and all forms of intoxicants. Adopted as the state religion for some centuries, it was eventually driven out of India by Brahminism, but outside India Buddhism has become one of

the popular religions of the world. It seems to appeal particularly to the Mongoloid races. In essence it is moderate, the middle way, the nothing extreme or excessive of certain Greek philosophers. It has found a home in Burma where it is superimposed on the animistic beliefs of the people.

The Sikhs are another offshoot of Hinduism. They number only four millions, but are a powerful militant body, with conspicuous business capacity which takes them all over the world. The founder of the religion was Nānak, the first Guru, who was born in A.D. 1469 and died in 1546. There have been nine Gurus altogether. The centre of their faith is the Golden Temple at Amritsar where their sacred book, the *Granth Sahib*, is deposited. Sikhism proclaimed equality of men, and the unity of God, rejected idolatry but maintained belief in the transmigration of souls. The Moguls persecuted the Sikhs, and Aurangzeb killed the ninth Guru for refusal to embrace Islam. This the Sikhs will never forgive. Between them and the Muslims there is still fierce animosity. Under the rule of Ranjit Singh, the Lion of the Punjab, the boundaries of the Sikh Kingdom were carried beyond the Indus and over Kashmir. They were finally defeated by the British in 1847. The memories of their greatness are fresh and strong.

There have been other reforming movements of local origin and extent, which reject priestly influence and caste. Most of them have been unsuccessful in the long run, and have succumbed to the absorbing influence of Brahmanism, and its resolute maintenance of the caste system. Against this, social reform has broken itself in vain. For better or for worse, the caste system seems to be an inseparable part of Hinduism, and although it will adapt itself from time to time to the needs of modern life, such

as travel and inter-feeding, in the essentials of marriage or purity of birth, and also in purity of ritual, it seems to remain unchanged and unchangeable. Individuals and societies devote themselves to social reform, but they are at every turn confronted with the difficulty that the social system is based on and permeated by religion. Child marriage, perpetual widowhood, and all other customs which seem to keep the Hindus in a condition resembling that of childhood have their sanctions in religion. The Brahmins will not readily forgo their privileges or surrender their position. Such at least is the experience of the past. What the future has in store none can foresee, but it is probable that changes will come slowly if they come at all.

Features of Hinduism are the bathing fairs and monasteries. At certain fixed festivals large numbers of Hindus congregate at some sacred spot on a river to bathe under Brahmin guidance and wash away sin. Since railways made travel easy, the numbers attending fairs often run to more than a million. In addition to religious merit it is a happy outing and a distributing centre for all kinds of goods. The monasteries are the abode of *fakirs* (religious mendicants) who are admitted into some brotherhood and live under the discipline of a *mahant* or abbot. These mendicants travel all over India, living on the alms of the people, curing them by incantations or amulets or drugs, and generally taking advantage of their credulity. From time to time they appear as the secret service of aggressive Hinduism, and they are always mysterious. Some of them are almost naked, some practise various austerities, some wear saffron or other coloured robes. They are a definite economic drain on the country, but the people are used to them and their exactions. Many of them, no doubt, lead exemplary lives but their

reputation even among their own co-religionists is not too high.

Islam, with its great doctrines of the unity of God and the equality of man in the presence of the Creator, stands out as the chief opponent of Hinduism, or Brahminism, in India. Although in some areas it is tolerant of Hindu ideals, and has to some extent adopted them, it is in essence uncompromisingly hostile. It is iconoclastic to the worship of idols, which forms so large a part of popular Hinduism, it ignores caste to a large extent, though it has been influenced by it, rejects child-marriage, and recognizes the remarriage of widows. Again, the Muslim eats meat and especially the flesh of the cow, the cheapest meat in India, an abomination to the Hindus, who reverence the cow. And, finally, Muslims can never forget that they have been a ruling race for many centuries in India before the British came and established their rule over the sub-continent. In their hearts they believe that, with help from Afghanistan, the frontier tribes, and the virile Muslims of the north-west and in Central India, they could, if the controlling hand of British rule were removed, conquer India. The Sikhs and other minorities demand a place in the sun, and the Gurkhas of Nepal look longingly upon the prospect of regaining their lost territories in the sub-Himalayan tract and the loot of the rich city of Calcutta, one of the great achievements of British rule.

While the peoples of India are thus diverse and differentiated by great barriers of language and religious belief, they live under a common sun and have certain characteristics in common. Nearly three-quarters of the population is agricultural, living in about seven hundred and fifty thousand villages. These villages are self-contained in many cases and have their own servants or craftsmen who supply local needs, the jeweller, the blacksmith and other

workers in metals, the carpenter, the potter, the weaver, the dyer, the skinner of dead animals and the worker in leather, the washerman. Their position and remuneration are regulated by custom. There are only thirty-four towns with a population of a hundred thousand in the whole of India. The town population is loosely knit together and has few of the restraints of village life, but often people of one caste or occupation occupy one quarter and look closely after one another. Bad characters of the hooligan type abound, variously called *badmashes* and *goondas*, who are always on the look-out for disorder and loot. Where factories have been put up, the mill-hands are sometimes difficult to control. As yet they have not any active trades unions. Many of them are not whole-time industrial workers. When they have saved a considerable sum from their wages, they retire to their villages to spend their savings there.

The influence of the family is all powerful. Every family supports its own members. There are no poor-laws in India. Indifferent to people outside, all Indians are bound up in the fortunes of their family. The conditions of life are such that there is no privacy, no nursery; the children grow up without reticence on the functions of physical life and seem to the sheltered western unusually precocious. They are kindly treated, and though ignorant of learning acquire an intimate knowledge of nature and her ways. The mass of the people are steeped in superstition, believe in magic and any manifestation of the supernatural, and are easily moved to religious fanaticism. The position assigned to women is low, but in practice the influence of women is often decisive in private and in public life. Their seclusion in *purda* (curtain) is said to date from the times of Muslim invasion, and varies in extent and rigidity over different parts of India. In towns and

amongst the English educated class, *purda* is no doubt breaking down, but at the other end of the scale it is gaining ground as an outward sign of increasing respectability. The desire of having a son is universal, in the case of the Hindu for the proper performance of funeral ceremonies, and female infanticide has been practised by many castes and especially by the Rajputs who follow the custom of hypergamy, or marrying their daughters into families higher than their own. Infanticide, *suttee* or the voluntary burning of a widow on her husband's funeral pyre, and human sacrifices are now only occasional. Slavery and thuggee have been abolished throughout India.

Among the aboriginal tribes are found endless varieties of primitive culture. Very prevalent is the belief in the evil eye. Criminal tribes move all over India, thieving and kidnapping, committing dacoities (gang robberies with violence) and other forms of violent crime under the protection of some tutelary god or goddess, to whom they make offerings and whom they approach in ordered ritual. Village crime is common, sordid and brutal, and it is often undetected. As in other countries, the criminal has taken advantage of improved communications and many inventions to circumvent the police. The police are feared in many ways and no one seems to want to help them, but whenever a police station in any locality is closed there is an outcry from the countryside.

The mass of the people take no interest in politics but much interest in religion. Their lives are simple but they love pithy sayings, and their observations and traditions give them often a curious imaginativeness. Their ways are not as our ways, nor are their thoughts our thoughts; the ignorance of simple arithmetic leads to many curious results, but perhaps the most distinguishing feature of

Indian life, as we see it, is that from birth to death the Indian peoples are surrounded and circumscribed by custom and by an etiquette which had its origin in some religious idea. In short, their lives and their outlook are bounded by religion.

Chapter II

THE INDIA OF THE PRINCES

By SIR WILLIAM BARTON, K.C.I.E., C.S.I.

[Sir William Barton, in the course of thirty-five years in the Indian Civil Service, served for more than twenty years in the North-West Frontier Province, and was then employed as Resident successively in the three great Indian States of Baroda, Mysore, and Hyderabad. Few men have had such a varied experience of the India of the Princes as well as on the Frontier.]

ONE of the outstanding events in India in the past ten years has been the rapid development in the political influence of the Indian States—those portions of India outside of British India. Occupying two-fifths of the sub-continent and absorbing over a fifth (about eighty millions) of its population, they must obviously be a factor of immense importance in the solution of the problem of a united India. In point of fact a clear view of the problem of Indian politics is impossible without a study of the position in Indian polity of the Indian States.

The States[1] number 562. Of the more important States, 108 share between them 514,886 square miles with a population of over sixty millions, and a revenue exceeding 420 million rupees (over £30 millions sterling or 146 million dollars) out of a total of 460 million rupees for the States as a whole. These 108 States are members in their own right of the Chamber of Princes. One hundred and twenty-seven States with an area of 76,846 square miles and a population of over eight millions are represented by twelve members of their order elected by themselves. About half of these two groups fall into the category known in official parlance as 'salute States', i.e. States

[1] See the yellow-printed portions in the map at the end of the volume.

whose chiefs are entitled to a salute of guns. The remaining 327 are of little practical importance, and are States only in name.

The States vary in importance from great territories like Hyderabad, Mysore, Baroda, Travancore, and Kashmir with up-to-date administrations and large revenues, to States with an area of a few hundred square miles and strictly limited powers. These latter are in many cases feudatories of the larger States, holding a guarantee from the British Government against oppression by their overlords.

A brief historical retrospect will help to illustrate the setting of the Indian States in the constitutional fabric of the Indian Empire. For this purpose the States may be roughly grouped as follows:

The Rajput States, including Kashmir.
Hyderabad and the Muslim States.
The Maratha States.
The Sikh States.
Mysore and the southern Indian States, and
The Orissa Feudatory States.

The Rajput States are the most numerous, with the widest range. They occupy practically the whole of Rajputana and Kathiawar. Rajputs predominated in Central India till the rise of the Maratha Empire. Many Rajput States survive on the central tableland. Rewa and Orchha are among the most important. We find Rajput chiefs also in the Feudatory States of Bihar and Orissa and the Central Provinces. In fact there is a great belt of semi-independent Rajput States from the Indus to the Bay of Bengal. The military hegemony of the Rajput in Northern India from the seventh to the twelfth century of our era is one of the most brilliant episodes of Indian history. The feudal baron of Europe had his counterpart in the Rajput

baron of the tenth century. Rajput India was an India of the golden age. But behind the passes militant Islam was gathering force. The storm burst early in the eleventh century. Rajput chivalry stood up against the shock for over a century, only to retire decimated to its fastnesses in Rajputana, Central India, and Kathiawar where its leaders have maintained themselves ever since. This in brief outline is the origin of the Rajput States of to-day. That they succeeded in preserving their identity during seven hundred years of Muslim rule is a tribute to their tenacity and resource. Throughout this period their relations with their Muslim rulers were of a feudal character. This was especially the case under the Moguls. The Mogul emperors married Rajput princesses; Rajput military contingents fought under their own chiefs in the Afghan highlands; Rajput chiefs served as provincial governors in all parts of the empire. A Rajput prince served as Governor of Kabul. The exhaustion of the Mogul Empire, following on Aurangzeb's military adventure in the Deccan, opened the path to Maratha dominance. During the whole of the eighteenth century Rajput and Maratha were locked in a death struggle which only ended when British military power became supreme. Many of the Rajput States lost the bulk of their territory to the Marathas, many were reduced to the position of Maratha feudatories or vassals both in Central India and Kathiawar.

Kashmir has a history all its own. A Mogul province, the bulk of the people embraced Islam. To the Moguls succeeded the Afghans, only to lose the province to the Sikhs. The British inherited it from the defeated Sikhs: they sold it to a Dogra Rajput, Chief of Jammu, a feudatory of Maharaja Ranjit Singh, ancestor of the present ruler. The petty Rajput States in the Simla Hills were tributaries of Nepal till after the Nepalese war of 1815.

The most important of the Muslim States are Hyderabad, Bhopal, Bahawalpur, Khairpur, Junagadh (Kathiawar), and Rampur. The paralysis of the Mogul power gave them their opportunity. Hyderabad was built up by Asaf Jah, the first Nizam, a great general and administrator under the Moguls, out of the Deccan territory conquered from the Muslim kingdoms of the south by Aurangzeb. Asaf Jah became practically independent in 1725. A chain of Muslim fiefs from Kurnool to Trichinopoly acknowledged his overlordship. Bhopal was founded by another Mogul general, an Orakzai Pathan from the Frontier, early in the eighteenth century. Junagadh and Rampur had a similar origin. During the same period Oudh, which was to figure so prominently for a century in the history of the British in India, broke away from the control of the centre. Over all these new political entities Delhi held a shadowy suzerainty till the beginning of the nineteenth century. Khairpur and Bahawalpur were fiefs of the Durani Empire of Kabul, relics of the conquests of the Punjab by Ahmad Shah in the middle of the eighteenth century.

The Maratha Empire represented a revival of Hindu nationalism against Muslim domination. It owed its wonderful success largely to the genius of Sivaji and his military successors. The decay of the central power at Delhi created the opportunity. Had the Marathas allied themselves with the Rajput chiefs of Central India and Rajputana, they might have dealt the Delhi Empire its deathblow and swept away all traces of Muslim dominance. They adopted a different policy, and we find them tearing down the old-time political structures the Rajputs had built and maintained for centuries, in Rajputana, Central India, and Kathiawar. Maratha generals carved out for themselves great provinces: Baroda with its tributaries in Gujarat and Kathiawar; Gwalior, Indore, Nagpur in

Central India, most of them with satellites of small Rajput chiefs in unwilling subordination. The Maratha Empire by the middle of the eighteenth century included most of Central India. It may be described as a loose confederation of big provinces, Gwalior, Baroda, Indore, Nagpur, and Satara acknowledging subordination for common purposes to the central authority, the Peshwa at Poona. Hyderabad and remote territories not actually in the military possession of the Marathas paid *chauth*, or one-fourth of their revenues as blackmail.

The Sikh States, Patiala, Nabha, Jhind, Kapurthala, &c., were established by military chiefs of the Sikh Khalsa (meaning 'select'), a religious brotherhood founded by the successors of Guru Nanak. They preserved their identity by allying themselves with Britain to avoid absorption into the Punjab of Ranjit Singh.

Mysore began its existence as a fief of the Vijianagar kingdom in the fifteenth century, and grew in extent and importance as that kingdom faded into insignificance after the crushing defeat it received in 1565 at Telukottah at the hands of the Muslim kingdoms of the Deccan. The Travancore State followed a similar evolution. It was built up early in the eighteenth century by an ancestor of the present ruling family out of a group of military fiefs held by Nayar chieftains.

The Orissa Feudatory States and the feudatory States of the Central Provinces fall into a category of their own. They are mostly peopled by aboriginal tribes. The ruling families are in some cases Rajputs: in others there is an admixture of Rajput blood. Most of them were in feudal relations first with the Moguls and later with the Maratha State of Nagpur. They came into relations with the British when Nagpur was annexed in 1853. The rulers of these States do not enjoy full political jurisdiction.

The historical panorama attempted in the preceding paragraphs will help to give an idea of the India of the eighteenth century, when the British emerged successfully from their struggle with the French in the South and stood forth as a recognized political power in the country. The Maratha Empire was at its zenith. The British held Bengal. From 1760 onwards their policy was to establish and maintain a balance of power among the rival forces contending for supremacy on the ruins of the Mogul Empire. With this end in view they contracted defensive alliances with Hyderabad and Travancore in the South, Oudh in the North, and with Baroda in Central India. They avoided conclusions with the Maratha Empire till Mysore had been brought into subjection. With Mysore out of the picture, the two great rivals, Maratha and Briton, stood face to face. There followed the Maratha war at the beginning of the nineteenth century. The British victories broke the cohesion of the Maratha Empire. Up to this period, the British alliances with the so-called country powers had been practically on an equal footing. The new series of treaties established in most cases a military protectorate, though at the same time the British abjured all claim to interfere in the administration of the allied States. The most important members of the allied groups at this period were Hyderabad, Travancore, Mysore, the Peshwa at Poona, Baroda, and Oudh. Military protection was provided for by the location in each State of a large subsidiary force commanded by British officers and under British control. The cost of these troops was provided for by cession of territory or by subsidy.

The alliance with Hyderabad had been throughout the period under review the keystone of British policy in the Deccan. It placed the resources of this great State at the disposal of the British in their final struggle with the

Marathas. The subsidiary force of Hyderabad was ten thousand strong, to which later was added the Hyderabad contingent with a strength of seven thousand. Large territories were occupied for the upkeep of the subsidiary force: the Nizam had ceded the extensive and valuable territory of the Northern Circars for a comparatively small quit-rent in 1765, thereby adding greatly to the resources of the British.

The Maratha wars of 1801–3 closed the first phase of British relations with Indian States. As already noted, up to that time the various alliances had been concluded on a more or less equal footing. The Treaty States now came within the orbit of British military protection. By far the greater part of India was at this time parcelled out among the Indian States. In the South were Tanjore (Maratha), Travancore, Cochin, and Mysore, with a few smaller States. The greater part of the Deccan, including the Berars, was under the flag of the Nizam; the rest of the Deccan was ruled by the Peshwa; the whole of the Central Provinces with the Orissa Feudatory States comprised the territories of the Bhonsla of Nagpur; Nagpur also held the Orissa coast-line; Sindhia and Holkar between them shared the rest of the central plateau to the Ganges. Baroda dominated Gujarat and Kathiawar. The Punjab was under the rule of Ranjit Singh the Sikh; the Afghan Duranis of Kabul had ceased to exercise control over Sind, which was ruled by its own Amirs; the Oudh Wazir whom we created a king in 1819 was practically independent of Delhi.

The British might now have stood forth as the Paramount Power in India, with all the responsibilities involved in the position. The policy of non-interference was, however, adopted, termed the 'policy of the ring fence'. The inevitable consequence followed. Rajput and Maratha in

Central India and Rajputana engaged in a war of extinction. The British turned a deaf ear to appeals for help from Rajputs dispossessed of their heritage. They refused a treaty with Bhopal. The framework of government broke down in Central India, and the country was ravaged by the hordes of banditti known as the Pindaris. In the end the British had to interfere. By a series of treaties they enlisted the support of the Rajput Chiefs in a policy of pacification. The great Maratha Chiefs in Central India and the Peshwa instead of supporting the movement rose against the British. The rising was crushed: the Peshwa disappeared and with him all hope of the revival of the Maratha Empire. There remained only the great Maratha States of Nagpur, Gwalior, Indore, and Baroda, with a few smaller States in Central India and the Deccan, like Kolhapur and Satara, and Tanjore in Madras. Baroda already had a subsidiary force. The policy of the ring fence was abandoned; the British accepted the position of suzerain. In most cases, the new series of treaties provided for non-interference, though in some the rulers agreed to accept advice. All agreed to place their foreign relations and their relations with other Indian States in the hands of the suzerain. Many dispossessed Rajput Chiefs who had gone into outlawry to escape their Maratha oppressors were reinstated as 'mediatized Chiefs', a term implying that the British Government guaranteed them against ill-usage from their feudal superior. The position of the Simla States is similar: so is that of the petty chiefs of Kathiawar and of the western slopes of the central Indian plateau, all tributaries of Baroda. These latter Chiefs are included in the Rewa Kantha and Mahi Kantha Agencies. Mediatized States stand in an entirely different category from the Indian State properly so-called.

The subsidiary forces of the States comprised in 1820 nearly half of the British Indian Army. The system was a simple, cheap, and effective method of developing military power from the British point of view. But it had its drawbacks. Incentive to good government is largely attenuated where the State has no longer to husband its resources in order to be able to speak with the enemy in the gates. A full treasury ceases to be an imperative necessity, a result which prompts extravagance: there is no inducement for the ruler to propitiate his subjects. The result is the weakening of the fibre of the administration: misrule often followed by chaos. The process of moral degeneration here described was exemplified in Hyderabad, Mysore, Travancore, Baroda, and particularly in Oudh and Indore during the quarter of a century following the settlement of 1818. The result was that we had to interfere in several cases to prevent bankruptcy or to restore order. In Baroda the British Government asserted the right to be consulted in the appointment of the Chief Minister: in Travancore an insurrection was quelled. In Hyderabad the right to be consulted on the appointment of Chief Minister was asserted as far back as 1801: a few years later the Resident took it upon himself to raise the Hyderabad Contingent in order to pacify the country: for fifteen years British Revenue Commissioners were largely responsible for the administration of the State. In 1831, as a result of an insurrection, the British took over the administration of Mysore, an arrangement which was to continue for fifty years.

With all this, however, the British Government refused to shoulder the responsibility of ensuring reasonably good government in the States as an incident of paramountcy. It preferred the less onerous theory of a feudal superiority with its concomitants of wardship, escheat, and the right

of confirming succession. Wardship involved the responsibility of regency administration in cases of minority; escheat was an easy method of dealing with inefficient administration on failure of lineal heirs. Escheat involved the repudiation of the Hindu practice of adoption, and gave widespread dissatisfaction among the Princes of India. It was undoubtedly one of the contributing causes of the Mutiny. Its chief exponent was Lord Dalhousie. The great Maratha State of Nagpur (the Bhonsla) was escheated in 1853: Satara, Tanjore, and Jhansi were similarly absorbed. So was Oudh, though here the excuse was continued misgovernment.

A new era of hope for the States dawned just before the Mutiny, when a distinguished school of Indian statesmen such as Salar Jung of Hyderabad, Dinkar Rao in Gwalior, Sakurni Menon of Travancore, and Mashar Rao of Indore set the example of improved administration. Britain owed much to the support of the Indian States in the great struggle of 1857, and especially to the Rajput States and Hyderabad.

The support given by the Indian States in the Mutiny was recognized by the concession of the right to adopt. This went a long way towards allaying the anxieties of the Princes.

The next half-century witnessed the slow development of political practice as governing the relations between the States and the Supreme Government. The principle most in evidence was the responsibility of the Paramount Power for protecting the country and maintaining peace and order. This took shape in railway policy, in the control of posts and telegraphs, maritime customs, Imperial taxation such as the salt tax, the limitation of armaments, the suppression of organized crime, such as thuggee and dacoity. The old policy of isolation was continued. Despite

the lack of confidence thus displayed towards them, the Chiefs gave a splendid example of loyalty in 1886 when the Penjdeh incident on the Afghan Frontier threatened war between Great Britain and Russia. Many of the Chiefs offered to raise regular troops at their own expense. The movement developed into the institution of the Imperial Service Troops of the States, which has added greatly to the strength of the British Indian Army. The closer interest taken by the Government of India in the internal affairs of the States during Lord Curzon's viceroyalty, largely because of the semi-bankruptcy of many States in the prevailing famine conditions, led to a good deal of anxiety as to Imperial policy. There was a widespread feeling that the interests of the States where they clashed with the interests of the provinces were in danger of being disregarded. Lord Minto, who succeeded Lord Curzon, made it his special endeavour to reassure the Princes, with some measure of success.

The Indian States adopted the Imperial cause as their own during the Great War: the resources of the States both military and economic were placed at the disposal of the Empire. The war was followed by a change of policy and attitude on the part of the British Government. It was felt that the old policy of isolation with the distrust it implied had long since been outworn. The British Government now recognized that the Princes had won the right to share in the counsels of the Empire. British India was progressing rapidly towards self-government, and it was impossible in the altered conditions to deny to the Princes their claim to consult together in order to preserve the privileges of their order. One of the results was the institution in 1920 of the Chamber of Princes, a consultative and advisory body in which the leading Chiefs are members in their own right; the rest elect

their representatives. A new era of confidence had begun.

The Chiefs of the more advanced States took the opportunity of joint consultation to clear their position as regards the incidence of paramountcy. It was felt that their treaty rights had been slowly eroded by the development of political practice, and they desired to set up a barrier against further encroachments. In response to their wishes an effort was made to codify political practice so far as this was feasible. It was found impossible to bring the major problem, the claim of the Crown to intervene to redress gross misrule, within the framework of the new code. A problem of equal importance forced itself on the attention: in the event of the grant of self-government to British India, in whose hands would paramountcy vest, in the Indian Government or in the Crown? This question with its implications and other issues arising from the claim of the States to share in British Indian customs duties, etc., was referred to the Butler Committee in 1927. The Committee reported in 1929. They found that paramountcy vests in the Crown. It was, they held, impossible to devise a formula that would define its scope. Paramountcy must be paramount in the interests of the Princes themselves. The hesitancy of the Committee to define the sphere of the Crown in its relations with the States caused disappointment in some quarters. The Committee did not entirely endorse the views of the States in the matter of financial relations. A further examination of the position with regard to customs was recommended. Final orders have not yet been passed on the Butler Report.

Side by side with the Committee, the States set up a committee of their own presided over by Sir Leslie Scott, to examine the questions under inquiry. This Committee

scrutinized very closely the existing treaties and the occasions on which it was claimed that the treaties had been infringed. The report of the Committee was laid before, and examined by the Butler Committee. It is sufficient to note here that Sir Leslie Scott and his colleagues would confine paramountcy to the conduct of the foreign relations of the States, including inter-state relations, and the whole responsibility of defence; in other words, the sphere of the Crown should be confined to foreign relations and internal and external security. It is admitted as a corollary of these principles that the Crown has a right to intervene in the internal affairs of a State if such intervention is necessary for the purpose of exercising the rights or fulfilling the obligations of the Crown in connexion with foreign relations and external and internal security—not otherwise. Some Princes, it is believed, desire to set up an independent tribunal to decide the question whether in any particular case the claim to intervention is justified. This attitude involves an anomaly. The authority of the suzerain power cannot be delegated to a third party.

The federation of British India and the States which the Butler Committee regarded as a remote ideal has now become a matter of public discussion. In such a scheme the responsibility of the Crown as Paramount Power will become a task of ever-increasing difficulty. The position would be simplified if the Chiefs would adopt a proposal recently put forward by several of their number that a self-denying ordinance should be passed fixing a reasonable civil list; introducing the reign of law; establishing a graded civil service on modern lines; and generally developing a reasonably up-to-date administration. Several States have already reached such a standard; others have adopted some but not all of the principles involved; many have considerable leeway to make up. There is yet another

outstanding difficulty, the question of the military protectorate set up by the treaties, and by agreement and usage in the case of the non-treaty States. The British Crown cannot abjure its responsibility in the matter: it can only divest itself of it with the full consent of the Chiefs. It must not be forgotten that British military protection has in many cases been paid for by the cession of vast tracts of territory, e.g. the Berars, the 'ceded Districts' of Madras, the Northern Circars (Madras) by the Nizam of Hyderabad, extensive territories in Gujerat by Baroda, and in Central India by Gwalior and Indore. From the point of view of the Chiefs military protection is the most essential safeguard. They will not forget that the British Navy has protected the shores of India for a century and a half, and that India must rely on that protection for some time to come. Most of them realize that without the moral support of the Paramount Power the States might find themselves faced by almost insuperable difficulties, in a Federated India. Paramountcy and military power cannot be dissociated.

The opinion is held in some quarters that the claim of the States that they have contributed their share of the military burden by cession of territory over a century ago, is an anachronism; and that their existing territories should share proportionately in Imperial military charges with the rest of India. This is not the place to discuss the equity of such a proposal. Let it be noted as an historical fact that the States paid for forty per cent. of the British Indian Army at the Mutiny period. Their help and resources contributed largely to the ultimate achievement of the British in bringing under one Crown the India of to-day and in holding it against all comers. If one takes into account the territories ceded by existing States, the subsidies paid, the proportion of British India forces

they maintain for Imperial purposes, the share of the Princes in the military charges of India to-day will not be found to be far short of the contributions of 1857. It is true that some States do not contribute in proportion to their resources. There is every reason that they should do so.

In the foregoing paragraphs an attempt has been made to describe the main phases through which British relations with the Indian States have passed as Britain built up her Empire in India. As already noted, a large group of the more progressive Chiefs think that the theory and principles of paramountcy which overlie the constitutional structure have been pushed too far. The question is complicated, and a full discussion of it lies beyond the scope of the present survey. There is something to be said for the point of view that the theory of feudal relations has been over-elaborated. The British Crown did not in fact succeed to the position of the Moguls *qua* the Rajput States. Their relations are governed by treaty or written agreement (*sanads*) as modified by subsequent usage. In the case of States of later origin, Hyderabad, Mysore, the Maratha States, and Travancore, the genesis of British relations was a definite treaty. In some cases it is true that the relations between the Government and a State or estate are in essence feudatory. Take, for example, the mediatised Chiefs of Central India, Kathiawar, and the Rewa and Mehi Kantha Agencies, and the Sirdars and jagirdars of the Deccan. These States have little real power. Political authority in their borders is mainly exercised by the political agent as representative of the Crown. There is, perhaps, an element of feudalism in the position of more important States such as the Orissa Feudatory States, where the political powers of the Chief in his territories are subject to limitation. As regards States with

full political powers whose position of subordinate alliance was originally defined by treaty or *sanad*, the diminution of their treaty status as paramountcy developed can be explained simply by the fact that the responsibility for external and internal protection in most cases justify the restrictions that have been developed. In other words, in order to secure immunity from external attack and internal disorder, it has been inevitable in the interests of India as a whole that the Chiefs should forgo some of the privileges of their position. That is paramountcy in brief. And there can be no doubt that no British Government would ever wish to push the boundaries of the principle beyond the limits prescribed by the interests of the States, and of British India, in the maintenance of internal and external peace.

The States are merged internationally with the British Empire. For international purposes their subjects are British subjects entitled to British protection when abroad. Similarly, the subjects of foreign countries can claim British protection in the States. The British Government claims jurisdiction over Europeans in State territories.

If we look at the political map of India inserted at the end of the book we see vast masses of territory represented by yellow patches in the white of British India. One could travel from Kashmir to Travancore almost without passing through British territory; or in the same way from the Indus to the Bay of Bengal. The great Maratha States of Baroda, Indore, and Gwalior lying as they do across Central India are in a very strong strategic position. They are highly developed States. The Gwalior army is perhaps the strongest of the State armies in India. If we were to colour with yellow Oudh, Tanjore, Jhansi, Nagpur, and the Berars on the map, then we may consider for a moment what the role of Britain might have been since

the Mutiny without the principle of escheat, especially if the British had created a native government equal to its task in the Punjab and on the Frontier. India might then have had an opportunity of developing in her own way on her own lines.

Many of the States are progressive, and in some administrative standards compare not unfavourably with British India. Travancore and Mysore have advanced almost as far as British India along the path of self-government. On the whole, however, the administrative structure is less elaborate, the minor officials less numerous, if not less rapacious in the States than with their political neighbours. In some States the administration is confided very largely to an executive Council, as for example, in Hyderabad, Baroda, Kashmir, Gwalior, Mysore, Indore, Bikanir, Patiala, and Bhopal. In a large number of States the judicial system is organized on the same lines as in British India, and not infrequently the local Bar has produced High Court Judges of ability and character. The system of finance is in most cases based on British Indian models. Education has made great strides in Indian India. Hyderabad has its university. So has Mysore. The standard of literacy in Travancore is the highest in India. Baroda is carrying out a policy of free compulsory education. Many States have an up-to-date medical department. In many there are scientific departments. It very frequently happens that State governments borrow expert officials, British and Indian, from the Indian Government in order to improve their own standards. In fact, there is no doubt, as observed by the Butler Commission, that a sense of responsibility to their people is spreading among all the States. The wave of political agitation that is sweeping over India has not left the States completely immune. Associations of State subjects working in British

India have in some cases sought to bring pressure to bear on the rulers. Mysore, in spite of the broadmindedness and sympathy of its ruler, has passed through a period of political liveliness. In Hyderabad, where the three great races of the Deccan meet, Maratha, Andhra, and Kanarese, all Hindu be it noted, there have been signs of political discontent. We do not find in the States great industries and business centres like Bombay and Calcutta: there are no teeming centres of rural life as in the Gangetic plains. Still, if in some cases the opportunities of life are less complex, there is compensation in the comparative absence of poverty and the struggle for existence. In many States are to be found rulers who give themselves almost entirely to the welfare of their subjects; and also devoted loyalty to the ruler. Much of the old picturesqueness of life in India still lingers in the States: in ancient ceremonial and stately processions such as the Dasserah (Hindu festival) processions in Mysore and Baroda. The capitals of many of the States are set in surroundings of great natural beauty: many of them are adorned with noble buildings. Many Chiefs prefer quiet dignity to ostentatious display. Everywhere will be found lavish hospitality and old-world courtesy. It is true to say that the States enshrine much of the best of India's past glories. They are splendid schools for political training, and they have produced statesmen of the first rank in India to-day among their Chiefs and Ministers. There is every hope that they will play a great part commensurate with their traditions and resources in the India of the future. Combined, they will be a dominant factor in a reasoned settlement of the political problems which now occupy the Indian stage.

Chapter III

THE AFGHAN FRONTIER

By SIR WILLIAM BARTON, K.C.I.E., C.S.I.

[See heading of Chapter II.]

THE problem of the Afghan Frontier is in its essence a question of military strategy. The great mass of tangled mountain and plateau, conveniently described as the Afghan highlands, that flanks the Indus Valley, stretching from the Hindu Kush to the Arabian Sea, enfolds the gateways into India from Central Asia. Through those gateways invading hordes for thousands of years have swept into the fertile plains of the Punjab and the Gangetic river valley. Beyond the passes virile tribes have developed their military strength in preparation for the conquest of the promised land. The menace is still there. The Afghan still turns hungry eyes on the wealth of India: still hopes that some day the tide of a *jihād* or Holy War will sweep across the Indus. Farther north the shadow of the Russian Bear obscures the horizon.

Unless she holds the passes, India cannot protect herself from the menace of Afghanistan and Central Asia. It is for this reason that she must not weaken her hold on the North-West Frontier. But for the urgent requirements of military policy she might very well decline all further responsibility for the Frontier and its people. For the Frontier is not India. In fact the most difficult of the problems before the Indian constitution-builder at the moment is to bring into the framework of an Indian Federation the million and a half fighting men domiciled between our political boundary with Afghanistan (the Durand line) and the Indus. Turco-Iranian by origin,

these people are alien in race, language, and historical traditions from India. Their fanatical devotion to Islam is another disturbing factor. For them the ideal of a united India has no attraction. The 'Durand line' divides Afghan tribes akin in race and traditions; they share the same political instincts. These instincts attract them to Kabul rather than to Delhi, and there can be little doubt that the Pathans of our tribal area would prefer to see the Frontier absorbed in the Kingdom of Kabul rather than in a Federated India. It is true that they dislike Afghan rule: they dislike any kind of rule for that matter: they are not enamoured of the rule of the Indian Government. The tribesmen of the settled districts are less ultramontane in their political tendencies, but with many Kabul is undoubtedly their spiritual home.

A glance at the historical background will show how rarely the country beyond the Indus, now included in the British-Indian boundary, has gravitated towards Delhi. The gravitation has in fact been persistently towards either Persia or Kabul. The Indus Valley was a province of Darius, ruled by Persian satraps. Alexander's generals absorbed the Afghan highlands in their Graeco-Bactrian Kingdoms. Still later Kabul and its dependencies were included in the Buddhist Kingdom of Kanishka, the Indo-Scythian ruler of the Punjab. Buddhism had ousted Brahminical Hinduism from the Indus valley. It has never re-asserted its sway. And Brahminical Hinduism is at the core of the great political movement in India. It has no appeal on the Frontier.

Islam drove out Buddhism from Kabul in the eighth and ninth centuries, gathering strength for a mighty effort against the Hinduism of India. Tartar and Turk and Mongol swept over the passes to establish empires at Delhi. From the fifteenth century hardy tribesmen from

the central highlands beyond Kabul poured into the Indus valley hinterland and into the plains beyond. The population of the borderland completely changed its texture in the next two hundred years. The great tribes of the Yusafzai, the Mohmands, Afridis, Wazirs, Bangash, Khataks, and others established themselves in the Indus valley and the adjacent hill tracts, Swat, Buner, Tirah, Tochi, Waziristan. The Kabul provinces were an appanage of the Moguls, who utilized them as a reservoir of manpower. From the middle of the seventeenth century history repeated itself and the Afghan highlands gravitated afresh towards Persia. Kandahar and Herat were lost to the Moguls towards the end of the seventeenth century. A little later Nadir Shah, the Persian emperor, absorbed the whole country to the Indus, before his onslaught on Delhi in 1739. On his death Ahmad Shah Durani, one of his generals, founded the Afghan Kingdom and the present ruling family at Kabul. He held most of the Punjab after his great victory in 1761 over the Marathas at Panipat. Half a century later the Sikhs pushed the Afghans beyond the Indus. A little later they extended their conquests beyond the river to the foot-hills, and held the country by a precarious tenure till the British succeeded them in 1849.

It will be seen then that political life on the Frontier has had little, if any, real contact with political life in India for more than 1,500 years. For the last eighty years the nexus has been British rule. That in itself has not been adequate to change the orientation of the Pathan. Will the position improve when the control of a Federal Government with a conceivable Hindu majority is substituted for that of Britain? One may blame Britain for the difficulties of to-day; a reasoned criticism must give due weight to the complexity of the problem which faced the British administrator in 1850. The policy adopted was to attempt

to assimilate the Pathan with the Punjab: to give his political ideals a definitely Indian tinge. That it has failed is perhaps not the fault of the British administrator: it is due rather to the fact that it is incredibly difficult to blend Pathan and Indian psychology.

The politician, especially the Indian politician, would perhaps not entirely disapprove of the early policy on the Frontier, in view of its objective. The alternative would have been to adopt a policy resembling the system introduced later on in Baluchistan by Sir Robert Sandeman after 1877. This would have involved the recognition of the political individuality of the Frontier, by the establishment of a separate administration. There was much in existing institutions and in the structure of social life which might have been worked up into a rough system of administrative machinery. Tribal jirgahs (conferences of tribesmen) could have been utilized for settling disputes and obtaining redress for crimes. The influence of the Khans and Arbabs (lords), or great landowners, when available, might have been co-ordinated with the tribal system. It would have been possible to devise a scheme of tribal police. A policy of the kind would have transferred responsibility for their own political, social, and economic development to the people themselves under the supervision of British officers. In a society riddled with the blood feud, the rigid code of criminal law imported from England was more likely to aggravate than diminish violent forms of crime characteristic of the Pathan temperament. Tribal law aims at redress and conciliation rather than punishment. The vendetta murder is regarded leniently in Pathan society: why the British should set their ponderous machinery to work to punish it with death has never been understood. It is true the Frontier Crime Regulations did modify to a considerable extent the British code: it did not

go far enough in substituting tribal law and procedure for Western standards. British law created the outlaw problem. Outlaws operating from tribal territory have been a pest ever since the British took over the Frontier. They have been responsible, directly or indirectly, for a large proportion of border crime leading to military expeditions as reprisals. The Pathan who commits a murder in a blood feud has many friends and sympathizers to facilitate his escape across the Frontier, and to harbour him when he returns to exact further retribution from his enemies. He is always sure of a welcome in tribal territory, where he is beyond the reach of the arm of the law. A less complicated system of administration would have made it possible to adopt measures for dealing with the blood-feud murder, more in accordance with the moral outlook of the Pathan. The removal of the outlaw problem would have greatly facilitated the maintenance of a quiet border. The Pathans on both sides of the Frontier have always hated our police and the police courts. There can be no doubt that, if it had been possible to devise a system of criminal law more congenial to border psychology, it would have had sympathetic reactions beyond the Frontier. The dislike of our administration by people of the settled districts has had the effect of strengthening the determination of their neighbours and kinsmen in tribal territory to maintain their independence. It was too late, when Lord Curzon separated the Frontier from the Punjab in 1901, to put back the clock and give the Province the administrative system that might have been evolved fifty years earlier. The only change of importance was to establish a Judicial Commissioner's Court at Peshawar in substitution for the Chief Court at Lahore.

The policy we adopted at the outset with the trans-frontier tribes was known as the close-border system. We

had no desire to add to our responsibilities by penetrating into the hills. In many places we were face to face with Afghan officials. Afghan troops held the Khyber; the Kurram Valley had an Afghan governor; the Afghans had advanced posts in other parts of the Border. The Amir of Kabul claimed an indefinite overlordship over many of the tribes adjacent to British territory, but did nothing to control them. Raiding and kidnapping were of almost everyday occurrence. The outlaw problem developed in intensity. Where possible British officers enforced the principle of tribal responsibility by seizing men and property of the tribes to whom the offenders belonged. In the end, when the chapter of murders and dacoities was full to overflowing, a punitive expedition was dispatched against the miscreant tribe. Escape from the vicious circle was impossible.

The Afghan war of 1878–9 is a landmark in British Frontier policy. The Khyber Pass was opened up: the Afghans were excluded from the Kurram Valley. The strategic position was greatly strengthened by the opening of the Bolan Pass and the occupation of Quetta and Chaman. This gave the British Indian Army the control of the line of approach to India most likely to be followed by an invader. The next few years saw the development in Baluchistan of what is known as the Sandeman policy, the keystone of which was to utilize the tribal system as the dominating factor in our relations with the tribes. Tribal jirgahs or assizes settled all disputes, tribal and inter-tribal, under the supervision of British officers; there were no Revenue or Criminal Courts. The system owed its success largely to the oligarchic organization of the Baluch tribes. In this respect the Baluch tribes differ from the Pathan tribes of the North-West Frontier. Another point is that we have carried our outposts up to the Afghan

border in the tribal area of Baluchistan. The result is that military pressure can be brought in the rear of the tribes, which means stopping their bolt-holes into Afghanistan. The position is exactly the reverse on the North-West Frontier.

In the decade following the second Afghan war the close border system began to crumble before the attacks of the school of forward policy. Without some form of control over the tribes any kind of progress seemed impossible. No improvement could be hoped for, so long as the Afghans claimed overlordship over our border tribes, and the border tribes could play off the British official against the Afghan. The demarcation of spheres of influence became an imperative necessity. This was achieved by the 'Durand line' to which the Amir agreed in 1892. It was demarcated throughout most of its length during the next two or three years from Chitral in the north to Baluchistan in the south. The Boundary Commission was attacked in Waziristan in 1895, and this led to the military occupation of Wana and the Gumal Pass. In 1893 a chain of forts was built along the high ridge of the Samana overlooking Tirah, on the Kohat border, thereby effectually controlling the Orakzai Afridis. Strategic points were occupied in Waziristan, in the Tochi Valley, and at Jandola. The Kurram Valley was occupied in 1893. Garrisons were placed on the Malakand and in Chitral in 1895, a line of levy posts being constructed in the Panjkora valley to keep the road open to Chitral. Tribes in many cases were paid large allowances for protecting the roads.

The forward policy had asserted itself effectually by 1896. The widespread disturbances of 1897 were largely due to what the tribes regarded as a threat to their independence. The extensive military operations then undertaken left the position practically unchanged.

The policy now came under heavy criticism on the ground that it frittered away the military resources of India by absorbing large bodies of troops in isolated positions, where they could not be used effectively in the event of war with Russia or Afghanistan. Lord Curzon decided to withdraw the troops to their base and to substitute for them irregular tribal corps under British officers. This plan was carried out in the Khyber, Kurram Valley, Tochi, Wana, and in the Zhob Valley. At the same time Lord Curzon adopted the view that Frontier administration was an Imperial responsibility. The Frontier was accordingly separated from the Punjab and placed directly under the Government of India. As a consequence Frontier administration has undoubtedly been more efficient, though it cannot be said that the Pathan is any more attracted than before by British-Indian rule. It is true that he respects it when it is strong: he worships force. And he often forms close friendships with British officers whom he knows and trusts. Frontier expeditions have hardly been less frequent under the Curzon system. It held during the Great War despite sporadic outbreaks, in one case (the Mahsud expedition) involving military operations on a large scale. Pathans in the settled districts enlisted in large numbers in the British armies. Trans-border Pathans, on the other hand, proved unreliable. That the whole border did not burst into flame was largely due to the steady friendship of the late Amir of Kabul, His Majesty Habibullah Khan. Had he chosen to proclaim a *jihād*, or holy war, there is little doubt that all his own tribesmen and the tribesmen on the British side of the 'Durand line' would have followed his lead. The shock would have taxed to the full the resources of the Indian Empire.

The Frontier system of Lord Curzon broke down a few

months after the close of the Great War. Amir Habibullah was murdered and his successor, influenced by the rumours of insurrections in the Punjab, proclaimed the holy war for which the tribesmen had long been waiting. The irregular corps in the outposts, the Khyber, Tochi, and South Waziristan gave way under the strain. Fortunately for the Indian Government, there was no serious outbreak in Tirah or north of the Khyber, while British subjects only joined in the risings in a few isolated cases. The *jihād* was a dismal failure. The aftermath of the war was a great campaign in the Mahsud country involving some of the heaviest fighting we have ever had on the Frontier. When peace was restored it was decided to locate a strong military force at Razmak, a position dominating Mahsud country. Strategic roads were driven through the country, and handed over to well-paid tribal levies (*khassadars*) to police. The result has been a quiet border. The militias have been re-formed in the Tochi and South Waziristan with more reliable material and a different name. Frontier salients are now all re-occupied by regular troops.

The position at the moment is difficult. The new King of Afghanistan has not yet established full control over his border tribes and the result is a feeling of unrest which reacts on the Indian Frontier. Political agitation in the settled districts has accentuated the trouble. The agricultural crisis is another disturbing factor. When the strong arm re-asserts itself in Afghanistan the situation should improve.

The feeling is, however, insistent that a clearer outlook is required in Frontier policy, especially as regards trans-border relations. We have been ploughing the sands for too long. The recent appointment of the Howell Committee to inquire into the problem of border administration gave expression to this feeling. The essence of the

problem is to devise means for assimilating into the Indian constitution the five and a half million tribesmen, with their fighting strength of nearly a million and a half, domiciled between the Indus and the 'Durand line'. It may be said that the trans-border tribesman is no concern of Indian politics. The Indian Government cannot control trans-border territory and must leave its people to their own resources. But is this any longer possible? The great mass of warlike people in our tribal areas cannot be left indefinitely in the air. They must gravitate either towards Kabul or Delhi. An improved system of government in Kabul bringing with it economic and social development —and all this is not at all unlikely—might make the appeal of Afghan nationalism too strong to be resisted. That will be an ever-present danger, unless a new policy is evolved which would induce a definite gravitation towards India.

Afghanistan is an important element in the problem that presents itself, for the problem has an international aspect, especially in view of the reactions of Soviet Frontier policy on the Indian border. Now the Afghan kingdom for the most part is built up on a congeries of small tribal republics acknowledging allegiance to Kabul, in most cases with reluctance. Their country is mountainous and difficult of access to regular troops. Then there are great nomad tribes like the Ghilzais and Powindahs, probably nearly a million people, who stream down the passes into India every year with their camels and flocks and are almost as much British as Afghan subjects. They persistently avoid their civic burdens. And they dislike the Duranis. Apart from the nomads, thousands of settled tribesmen leave their frozen mountains in the winter for India where they work as labourers, earning enough to eke out their subsistence in the summer. Most of the

Afghan tribesmen are well armed, which increases the difficulty of control. They are in fact only kept within bounds by an admixture of force and Oriental diplomacy, playing off one faction of a tribe against the other and so on. In such conditions a strong and well-equipped standing army is the first essential—no easy matter in an undeveloped country. Faced with such difficulties, it is not surprising that the Kabul Government should at times have utilized the national spirit in an endeavour to establish its influence over the tribes on our side of the 'Durand line' as well as over its own. The custom of former governments at Kabul has been to receive deputations from tribes under British-Indian rule: to pay allowances to *maliks* (headmen) from all the big tribal groups, Mohmands, Afridis, Orakzais, Wazirs, &c. All this enhances the prestige of Kabul, while it weakens the political influence of the Indian Government.

Our own tribes are mainly of the extreme democratic type as on the Afghan side of the political boundary. Social life is honeycombed by the blood feud. Each homestead is a fort: cultivation is often impossible because fields are within rifle range of the enemy's tower. There are few if any villages. A rifle is more prized than a wife. Every man is a law unto himself. Tumultuous gatherings assemble at times to settle tribal and inter-tribal affairs, frequently under the influence of the *mullas* (religious leaders). Islam has a strong appeal, and one frequently finds a priest, if gifted with a strong personality, practically ruling a tribe through his religious influence backed by a mob of fanatical disciples. Tribal responsibility, the sheet-anchor of our relations with the tribes, is a well-known rule of border law which the tribesmen enforce among themselves. In most tribes will be found men who by reason of ability and character, or the possession of

a comparatively large area of land and the adherence of vassal outlaws, exercise influence among their fellow tribesmen. It has been our custom to encourage such men by the grant of allowances: in some cases they are recognized as tribal leaders. Very often, however, a tribal conference summoned by a British political officer to settle claims against the tribe is attended by most of the tribesmen as well as the headmen.

One of the outstanding difficulties of promoting the advance of civilization across the Frontier is economic. Almost everywhere the population presses heavily on the means of subsistence. Land is won in most cases by terracing from the hillside and is a scarce commodity. Service in the Indian Army was the chief source of employment till trans-border men proved their unreliability in the Great War. Hill men hate the plains in the summer: many of them, however, are compelled by force of circumstances to seek employment far afield. Pathans are to be found by the hundred in the mill areas of Bombay: many work as stokers in ships. Others cultivate as tenants the lands of their more fortunate kinsmen in British districts. The majority remain in poverty in their bleak hills. Many would be attracted by congenial occupation in the cold weather if such could be found. That way may lie a partial solution of the difficulty.

As already observed, we have had no definite policy with the tribesmen. The close-border policy was no policy. The forward policy was mainly concerned with military strategy. The ideal policy would be to develop the indigenous institutions of the Pathan tribesmen into some form of rough and ready administrative machinery with which the authorities of the Indian Government could deal. Feuds and jealousies would stand in the way of an effort of the kind. It might be worth while trying the experiment

where conditions were favourable. Government support would be necessary, and this would involve expense. Indian statesmen will, however, have to realize that if the Frontier menace is to be exorcized it will mean heavy expenditure: education, economic and political development are the main things necessary if the Afridi, the Mohmand, the Wazir are one day to sit as Senators in the Imperial Councils. And it may be necessary to adopt in other parts of the Frontier the infiltration policy that has been so successful in Waziristan.

The political outlook of the Pathan of the settled districts does not greatly differ from that of his trans-border kinsmen except in the case of those living in close proximity to urban centres. They respect the British-Indian administration when it is strong: they appreciate the effort of British officers to administer impartial justice. Their nationalism is not Indian nationalism: it is Pathan nationalism born of Islam and *Pukhtunwali* (the customs and traditions of the Pathans). By tradition and character the Pathan is far more capable of working popular institutions than is the case with the major portion of the Indian population. Caste is unknown in Pathan social life: the Pathan is democratic; the form of government he likes best is a tribal republic where a man must have both wits and courage if he is to hold his own. There were no reactions on the Frontier following the Morley-Minto reforms of 1909. With the transfer to Indian assemblies of a large measure of political power in 1920, the position altered. The effect of the spread of Western education through the agency of the great Islamiah College founded at Peshawar in 1912 had begun to make itself felt. The young Pathan of the middle classes began to realize that Indian politics might react to his prejudice unless he could himself exert some political influence. The fact that he had been denied

reforms was a blow to his national pride. Claims were put forward: the Bray Committee was appointed to investigate the question. It recommended the introduction of a representative council on Morley-Minto lines. The Government of India deferred a decision on the report. Meanwhile agitation was developing, strengthened by the apprehension that the authorities were being influenced by a reactionary group of Khans and Arbabs (lords), anxious to acquire the monopoly of political power. The Congress invasion of 1930 brought on a revolutionary activity known as the Red Shirt movement. This led to serious riots in Peshawar city followed by an Afridi attack on Peshawar itself. The claims of the Province to a recognition of its political rights have received fresh emphasis from the support given them by the Muslim delegation to the Indian Round Table Conference of 1930–1, which demanded popular government in the North-West Frontier Province as a condition precedent to a scheme of Federation.

Can Imperial interests on the Frontier be reconciled with Pathan aspirations? That is the question before British and Indian statesmen. A solution is imperative. It should be possible, if Pathan leaders will adopt a reasonable attitude. Obviously popular government must be confined to internal affairs: it can have no concern with border administration. There must be safeguards impervious to attack. The head of the Government in Peshawar must have full authority, as at present, to utilize the machinery of the police administration when necessary for the protection of the border. This might in some cases involve the overriding of the authority of the Minister. The anomaly might be avoided by placing the police portfolio in official hands for a term of years, or possibly by removing the police jurisdiction of the Ministers

from a belt of country, say, ten miles deep from the boundary.

The Frontier Committee appointed to consider the question of the future status of the North-West Frontier Province in an Indian Federation submitted its report in 1931. The outstanding proposal is that the Province should have its own budget, with a large subvention from the Central Government. Border administration should continue to be a central subject. Law and order should be provincial. Provision is made for military control of roads when this is urgently necessary in military interests. Presumably the Governor will have the power of veto if he consider the policy or proposal of a Minister such as to endanger the peace of the Border. Some such safeguard appears essential. It was announced at the second session of the Round Table Conference that the province was to be raised without delay to the status of a Governor's Province.

For eighty years the sole responsibility for the Frontier has rested on the shoulders of Britain. That era is now approaching its close. We have to admit failure to assimilate Pathan nationalism into the wider nationalism of India. But there is another side of the picture. British military power has kept India immune from invasion for over a hundred years: the Frontier is held more firmly than ever. The idea of a régime of law and order has been established in the mind of a warlike and turbulent people. The Pathan, too, has learnt to respect the British-Indian administration. All this represents a distinct advance. Without it there could have been no possibility of the merging of the Frontier in India. It will rest with the future Government of India by sympathy, goodwill, and friendship to induce the Pathan to forget his nationalism in the wider patriotism of a united India.

Chapter IV

THE MACHINERY OF GOVERNMENT

By SIR WILLIAM MARRIS, K.C.S.I., K.C.I.E.

[Sir William Marris spent a large portion of his service in India at the administrative head-quarters of Government, and served as Reforms Commissioner with the Government of India during the period before the introduction of the Montagu-Chelmsford Reforms. He was appointed Governor of Assam in 1921, and Governor of the United Provinces in 1922. After his retirement he was created a Member of the Council of the Secretary of State for India. Since 1929 he has been Principal of the Armstrong College, Newcastle-upon-Tyne]

THE development of the system of British government in India falls into well-marked chapters. The first records the gradual assertion of Parliament's determination to be master in matters which in the beginning were entirely controlled by the Directors of a trading corporation or their agents in India. This period lasted till just after the Mutiny. The next chapter marks, first, the completion and improvement of the administrative machine, and, secondly, the beginnings of a process of giving Indians some effective voice in direction of policy and an increasing share in its execution. This stage lasted till just after the Great War. The third epoch began in 1917 with the declaration that policy should henceforward be directed to enabling the people of India to govern themselves. During the years 1919–29 India traversed the initial stage of this third period; and we are now engaged in the difficult investigations and consultations which are to determine what the next stage shall be.

The primary object of the original British settlers was to make trading profits, and no question arose of governing the country until the break-down of native rule in Bengal left Clive no choice but to assume responsibility for ad-

ministering that vast region of the country in the name of the ineffective Mogul emperor at Delhi. The precariousness of the Company's finances, the reports of abuses which followed on Clive's retirement, and the ostentatious arrogance of the retired officials who came to be known as 'Nabobs' were causes which first stirred Parliament to assert its authority. Pitt's India Act of 1784 set up a parliamentary Board of Control which thenceforward was responsible for the political affairs of India, though the direction of commercial policy, and therewith great influence, still remained with the Directors. The Company's charter was made renewable for periods of twenty years, and before each renewal Parliament held a formal inquiry into the Indian administration. In 1831 Parliament first maintained the sovereignty of the Crown over all Indian territories in possession of the Company; and an Act of 1833 required all laws made in India to be laid before Parliament. Thus the indefinite dominion which the Company had derived from the Moguls in virtue of Clive's treaty after the Battle of Plassey came to be gradually overlaid by a new sovereignty resting on parliamentary statutes; but even up to 1857, the Company's Directors who retained the right of initiative and had the advantage of expert knowledge were able to exercise a powerful influence on the administration. It required the shock of the Indian Mutiny to seal the fate of the greatest and strongest mercantile corporation in the world. By the Act of 1858 the powers of the Court of Directors and of the Board of Control passed to a parliamentary Secretary of State of India for India. With him (in this respect unlike all other Ministers of the Crown) was, and still is, associated a Council designed to provide him with expert advice on Indian questions. The Secretary of State, like all other Ministers, is responsible to Parliament for his

official acts, and therefore has a general power of disregarding or overriding the advice of his Council. It is true that in respect of certain particular matters he cannot act without the vote of a majority in Council; but this particular reservation has never operated to render him more immune than his colleagues in the Ministry from parliamentary criticism. The India Act of 1858 thus vindicated the legal supremacy of the British Parliament over administration in India.

The same period 1773 to 1858 witnessed the gradual extension of the administrative system and the growth of most of the major provinces. The early settlements at Madras, Bombay, and Calcutta were each administered independently of the others, by a Governor and a Council consisting of senior servants of the Company. But foreign enemies necessitated a common policy, and therefore the Regulating Act (1773) gave the Governor of Bengal superintendence over Madras and Bombay as Governor-General in Council. The Governor-General's authority, vague and ineffective at first, strengthened as wars with foreign powers and native princes led to a pushing out of boundaries which brought the presidencies closer together. Madras and Bombay (except for Sind) had taken final shape as early as 1818; but long after that date, in spite of the frequently expressed apprehensions of the Board of Directors, the need for securing the Presidency of Bengal led to successive extensions up the Ganges valley to the Punjab, into the plateau of Central India, up the Brahmaputra, and even into Lower Burma. Before this process had gone far, it became apparent that the Governor-General in Council could not administer directly so huge an area, and so Lieutenant-Governorships came to be created, first, for what are now the United Provinces, and subsequently for Bengal and the Punjab. Minor provinces

like the Central Provinces and Assam, and for a time Burma, were administered by Chief Commissioners. In this way the Governor-General in Council ceased for the most part to govern directly, but became the directing and supervising authority over the whole country. By 1919 the units of administration of British India comprised, first, the three presidencies of Bengal, Madras, and Bombay, administered by a Governor in Council (in Bengal a Lieutenant-Governor in Council had been replaced by a Governor in Council in 1912 when the seat of the Central Government was moved from Calcutta to Delhi); secondly, the other four major provinces of the United Provinces, the Punjab, Burma, and Bihar with Orissa which were all under Lieutenant-Governors (though Bihar by reason of its previous association with Bengal had an Executive Council as well); thirdly, the two Chief Commissionerships of the Central Provinces and Assam; and fourthly, certain minor charges, namely, the North-West Frontier Province, British Baluchistan, Coorg, Ajmer, the Andamans, and the small enclave of Delhi, which remained more directly under the Governor-General in Council.

Up to 1909, and perhaps for ten years later, it would be accurate to describe the administration of India as a huge civil or non-military autocracy, vesting originally in the East India Company, then shared between the Company's Directors and the Home Government, and after the Mutiny taken over by the latter. Constitutionally speaking, the supreme power ever since 1858 has rested with the electors of Great Britain, who made and unmade ministries and could call the Secretary of State and the whole Cabinet to account if unacceptable things were done in India. From the Secretary of State downwards to the smallest public servant in India, authority ran in an

unbroken chain secured by two simple provisions of the Statute. 'The Governor-General in Council is required to pay due obedience to all such orders as he may receive from the Secretary of State'; and 'Every local Government shall obey the orders of the Governor-General in Council'. In the provinces again were a series of subordinate authorities, departmental or territorial, having executive officers, deputies, and assistants under them, all under the supervision and amenable to the orders of the local Government. Thus, in theory, even the smallest official transaction in the remotest Indian village was liable to survey and correction by Parliament.

At each successive level, of course, control was less rigid in practice than in theory. Parliament as a matter of fact did not legislate on Indian matters except to alter the constitution or to authorize a loan. Legislation on ordinary matters it left to the Indian legislatures created by itself, which will shortly be described, though over all such legislation the Secretary of State kept fairly close control. Nor did Parliament vote the revenue or expenditure of India, but was generally content to survey the annual statements of receipts and charges, and to receive from the Secretary of State an account of the year's administration. When any Indian question attracted public interest, Parliament had of course perfectly effective ways of making its opinion felt; but in ordinary practice it did not make a custom of interfering. There was a general agreement with the maxim that Indian questions should not be made a subject of party strife lest India be 'lost on the floor of the House of Commons'. The feeling that Indian problems were remote and technical largely explained this indisposition to intervene. Constant interference with the affairs of a distant Asiatic country must have enormously increased the difficulties of those immediately responsible

for its security and welfare. On the other hand, it is possible that a more intimate understanding of Indian conditions on the part of Parliament might have made the political development of that country less spasmodic and contentious. In effect, Parliament and the British people were generally content to leave decisions largely to the Secretary of State and to the Government of India; and power rested, sometimes in Whitehall, but possibly more often in Simla or Calcutta, according as the personality of the Minister or the Viceroy for the time being predominated; and successive Governments in India relied far less on any mandate from the people of Great Britain than upon their own experience and efficiency and the tradition and prestige of a century of rule.

The accepted view of the legitimate duties of government in India is wide compared with that of more advanced countries. The illiteracy and poverty of the masses of the people inevitably limits their capacity and their disposition to manage their affairs; and when British administrators assumed the government, it was natural that they should take a wider view of their responsibilities than if they had been dealing with their own people. An outstanding example is in the minute record, field by field, which is maintained in many provinces, of land-tenures, rents, and harvest-yields, and which serves as a basis not merely for the collection of land revenue, but also for the protection of tenants against landlords, for remedial measures in times of scarcity, for the development of irrigation and the encouragement of agriculture, and indeed for many other subsidiary purposes as well. In times of famine again the Government steps in and organizes relief works. It manages a wide forest area, and also an extensive canal system, besides railways, telegraphs, salt mines, and excise. Its activities in such matters as education,

public works, and the prevention and cure of disease are wider than in England. It takes a lead in promoting co-operative credit or in encouraging industry. It lends money to town councils and county councils and agriculturists and landlords. In these and other ways it has assumed a measure of general responsibility for the physical and intellectual well-being of the people which other administrations are content to leave to private or corporate enterprise where these are forthcoming.

Up to 1919 there was no legal distribution of the tasks of government between the centre and the provinces. The Government of India, which was responsible for the whole country, necessarily kept certain business in its own hands, such as the Army and relations with other Asiatic countries, and (for the most part) with the Indian States; and for similar reasons it also controlled the currency and exchanges, the debt, tariffs, the post office and railways, and audit and accounts. It shared responsibility for other internal concerns, such as education or the police or land revenue or public health, with the provincial governments. These, indeed, were primarily the concern of the provinces; but in all of them the Central Government up to twelve years ago exercised an unquestioned right of entry, either of its own motion, or on appeal, which rested on the statutory provision already quoted, and found a practical justification in the fact that the Central Government controlled all the finances of the country.

Though general propositions were from time to time enunciated upon the subject, no plain and positive criterion was established as to the proper occasions and limits of the Central Government's control. 'Minute interference' was reprobated, but it was recognized that, if the Governor-General in Council regarded action taken in a province as seriously mistaken, it was not merely his right but his duty

to step in. In practice, the relations between the centre and the provinces were the result of forces pulling in opposite directions. Material developments, improved communications, the increasing reaction of one part of the country or another were all factors tending to bring the Government of India upon the scene; just as the constantly increasing burden of work and the variety of local conditions were arguments for provincial liberty of action. Among recent Viceroys the most active centralizer was Lord Curzon, who was not content merely to initiate improvements throughout the administration, but sought to keep control over them till they came to fruition. In the reaction from the strenuous efficiency of his days, which came when Lord Minto succeeded him, there was a disposition to concede more liberty to the provincial governments. The phrase 'provincial autonomy', which has since acquired an entirely different sense, was first used in 1912 as an expression of the desire of provincial governments, not in the least for representative institutions, but for escape from the rigid control of the Government of India. During the years 1909–19, and partly as a result of the Minto-Morley reforms which are described below, the stiffness of the Government of India towards the provinces was thus in some measure relaxed; but it was reserved for the reformers of 1919 for the first time to impose positive limitations upon the power of the Central Government to have its way in certain spheres of business, which were definitely recognized as a purely provincial responsibility.

Except in so far as the Government of India intervened with their policy, the local Governments, whether consisting of Governors in Council, Lieutenant-Governors, or Chief Commissioners, had full executive authority in their own domains. They could not indeed dismiss public

servants appointed by the Secretary of State, and these, and others as well, had a right of appeal to the Central Government and to the Secretary of State against orders of punishment by the local Government; but such cases were comparatively rare: the ordinary work of all officials in a province was guided, supervised, and appraised by the provincial Government. The main task of administration rested with the Indian Civil Service, which constituted the general executive corps. Provinces are divided into districts which are generally combined in groups of from four to six, into divisions under a commissioner. The average district is bigger than the average county in England. Some provinces in size and population are bigger than some of the smaller countries in Europe. In the United Provinces, where the districts are small and the population dense, each district officer is on the average in charge of an area as large as Norfolk and a population as large as that of New Zealand. The Commissioner of Tirhut looks after far more people than the Government of Canada. The district officer, in his dual capacity as head of the revenue system and as chief magistrate, is in touch with every portion of his territory, and acts as the representative of Government to the people in most of the matters which are of concern to an ignorant agricultural population. There are other specialized services dealing with particular matters like canals and roads and buildings, hospitals, agriculture, factories, and co-operative credit, and these are not under the district officer but under their own departmental heads; but in all these matters also the efficient district officer plays his part either by way of stimulus, mediation, or supervision.

The one exception to the all-pervading range of this official system (apart from the development of the legislatures which will be discussed hereafter) consisted in the

institution of municipal and district boards. Ever since Lord Ripon's attempt in 1882 to invest these with vitality, most British administrators had looked upon them as likely to provide the field in which Indians might best be trained in the management of public affairs. It was hoped that experience in dealing with the business of towns and counties might qualify people for the management of bigger issues. Various reasons combined to defeat these expectations. The local boards lacked money to do much, and interest in local affairs, except in a few large cities, was slow in developing. In rural areas where people were ignorant, and where the interests involved were diffused over large areas instead of being visibly concentrated as in towns, the work of the boards even up to 1919 was largely done by the district officer in his capacity of chairman of the board. The town councils generally began to elect their own chairman about 1915; from which time onwards therefore the elected representatives of the ratepayers controlled the business of schools, roads, drainage, lighting, and the like within the towns; but even in these comparatively progressive areas, the influence and support of the district officer were generally needed if real progress was to be made or unpopular reforms effected. Up to the critical year 1919 it cannot be said that except in a few of the largest cities, Indian representative bodies had gained much practical experience or convincingly demonstrated their capacity. This was a serious lacuna, seeing that the aim was to try the experiment of popular control upon a wider stage. In the earlier days of the local boards it can hardly be doubted that official guidance and control were needed if any progress was to be made. But the reformers of 1919 believed that official guidance had been prolonged up to a point at which it had impeded the growth of initiative and responsibility; and together with

their other reforms they desired to see the business of the local boards entirely freed from external control.

We may sum up the position by saying that up to 1909 at all events, and even in some measure up to 1919, the Government of India had remained a great closely compacted official machine, essentially autocratic, well suited to a backward people and well understood by them. It had many virtues: it was impartial, efficient, and (though many Indian critics deny this) relatively cheap; its officers had integrity and tireless devotion to duty; they were seen at their best in emergencies like famine or floods, riots or epidemics. They were generally liked and trusted by the villagers. If some of them were less patient and sympathetic in their dealings with the educated classes, this was largely owing to the reluctance of the practical administrator to see his work pass from him into less competent hands. Government in India had to its credit a long record of achievements of which England may well be proud. It was no slight thing to have redeemed the land from chaos, and given it an ordered and just administration such as it had never known; to have repressed violence and enforced the rule of law; to have built roads, railways, and canals and schools and universities and hospitals. Its critics charge it with having shown a Gallio's indifference to higher things—to all that is concerned with the growth of national character and the soul of a people. Its defenders might plead that the daily administration of so vast a country surely laid sufficiently heavy burdens on a small corps of Englishmen, to explain a possible failure on their part to be prophets, philosophers, or apostles, as well as magistrates, engineers, or doctors. Or rather, if the best defence lies in attack, they might claim that the roots of Indian nationalism spring from soil which their own labours have provided, from the establishment of security

and the rule of law, improvement of communications, the teaching of the English language and lessons of English literature and thought, and perhaps, above all, from personal inspiration and example. There is no denying the fact that the British administration up to 1919 remained essentially autocratic. But the verdict of history may be that it cannot have been a bad autocracy which stimulated by precept and example those stirrings of spirit which confront us in India to-day.

India entered upon her new political existence with the passing of the last Government of India Act in 1919. In order to realize what momentous changes that statute effected, we must glance at the earlier steps which had been taken in the direction of enabling Indian opinion to affect the policy of government. For a long time the idea never occurred to any one that, in the small legislative councils which were intermittently called together for law-making in India, there lay dormant the germ of parliamentary bodies which should make and unmake executives and thereby assert the sovereignty of the popular will. The Charter granted to the Company by George I empowered the Governors in Council to make 'bye-laws, rules, and ordinances' for the good government of their territory; and even up to the time of Dalhousie law-giving in India continued to be a purely executive process. Even Dalhousie's reforms did not go beyond adding additional official members for legislative purposes and making the business of legislation public. Not till after the Mutiny was the first step taken to associate non-official opinion with the making of laws. The Statute of 1861 gave the Governor-General power to nominate to his Council for legislative purposes not less than six nor more than twelve persons, of whom not less than half were to be non-officials, Indian or otherwise. In Madras and Bombay

also the Governors' executive Councils were to be expanded on similar lines, and steps were taken to establish similar councils in the younger provinces. But these changes were directed strictly to the building of a more efficient law-making engine; there was no notion of allowing the new bodies to question or criticize the executive. The councils were not meant to be the forerunner of responsible parliaments.

The next step forward was taken in Lord Dufferin's time. He desired 'to give a still wider share in the administration of public affairs to such Indian gentlemen as by their influence, their acquirements, and the confidence they inspire in their fellow-countrymen are marked out as fitted *to assist with their counsels the responsible rulers of the country*'. He, too, contemplated no approach to parliamentary institutions, but he did desire 'to allow Indian criticism, suggestion, remonstrance, and enquiry to exercise a very powerful and useful influence on certain classes of public business'. The Act of 1892 did not indeed provide for the election of the non-official members, but it directed the Governor-General and the local Governors to nominate them after consultation with representative corporations or associations; but, because nominations by the recommending bodies came to be accepted as a matter of course, the fact of election to most of the non-official seats came to be firmly established. At the same time the Councils were given powers to question the executive and to discuss the budget, concessions which obviously involved the important admission that they were no longer purely legislative or advisory bodies.

The Minto-Morley reforms of 1909 not only enlarged the Councils still further and provided that most of the non-official seats should be filled by election, but left the executive government in the enjoyment of the barest

possible majority of votes, and that only if it could obtain the support of a few nominated non-officials. Only in the Governor-General's legislature was a narrow official majority retained. The Act of 1909 further enabled the Councils to discuss resolutions, whether on the budget or any matter of public importance, and to cross-examine Government on its replies to questions. These further changes developed the new conception of the Councils. They were not merely to advise but they were also to check and criticize, though not to control. Lord Morley explicitly disclaimed any intention of moving directly or indirectly towards the establishment of a parliamentary system in India; and yet, by extending to the utmost limit the Indian members' opportunities of question and criticism while leaving the executives unchanged and irremovable, his scheme failed to ensure that criticisms would be tempered by any sense of responsibility, while it also left no room whatever for further advance along the same lines. The Minto-Morley reforms thus represented the last effort to combine the cautionary idea that power and responsibility must remain wholly with the executives appointed by the Crown with the adventurous idea of giving Indian opinion the utmost opportunity of criticizing and influencing the executive. Obviously, when the next advance was due, it would have to be sought on different lines.

Our concern being strictly with the machine of government, we cannot pause to examine the causes or to trace the stages of the growth of nationalism which is reflected in these successive constitutional changes. It must suffice to say that the years 1906–14 had seen a great spread of the political consciousness among the educated classes, which had first begun to manifest itself in the 'eighties and had been stimulated by various causes, economic, racial, and political, in the generation since that time.

On top of other quickening events, both external and internal, came the Great War; and the sentiments evoked by the war and by the part which Indian troops and money played in it did much to stimulate the sense of nationalism. There was general agreement by 1917 that the time was ripe for another move forward; and in 1919 the last Government of India Act gave legal expression to a scheme of reforms which had been propounded by Mr. Edwin Montagu and Lord Chelmsford.

To have carried matters merely one stage farther on the old lines, and to have left executive governments confronted with hostile majorities in the legislature, would obviously have led straight to deadlock. On the other hand, to have transformed the entire constitution on popular lines, and thereby committed the most vital interests of the country to Indian administrators elected by an unpractised electorate, would have been to incur unreasonable risks for which very few, even among fervid Indian nationalists, were then prepared. The reformers tried to solve the problem by a new and ingenious device. Selecting the provinces as the main field of their experiment, they divided the business of administration into two categories, and placed those which were regarded as of critical importance (e.g. the law courts, police, prisons, land revenue, canals, and finance) as 'reserved' subjects under the Governor in Council, and those which might be thought less critical (e.g. education, agriculture, public health, hospitals, etc.) styled 'transferred' under Indian ministers responsible to the legislature. It may be argued that certain fallacies underlay both the fundamental idea of division, and also the particular classification adopted; but no one could produce any more plausible device, and in the end 'dyarchy', or the division of subjects, came to be adopted largely in the faith that the means would be

found to work it. Both as regards legislation and the budget (two essential attributes of government), the scheme was necessarily imperfect; and it left the two halves of the government more interdependent than was to be desired if either was to enjoy the liberty of action which the underlying idea postulated. At the same time the provincial legislatures were enlarged and the franchise lowered. But a most serious obstacle to the free play of the elective principle was presented by the refusal of the great Muslim community to vote in open constituencies with the Hindus. The Muslims clung to the assurance given them by Lord Minto in 1908 that they should have so many seats reserved for them in the legislatures and should vote only for Muslim candidates on a Muslim roll. The reformers with great reluctance felt constrained to meet their wishes, nor could a concession extended to the Muslims be denied to other important religious minorities.

In their dealings with the Central Government, the reformers were more cautious and less logical. They left the executive still irremovable and still responsible to the Secretary of State; but they gave the main chamber of the central legislative a strong elective majority, and (as their proposals emerged from Parliament) they left the Governor-General in Council entirely dependent for his supply or his vital legislation, in cases where he could not secure the assent of the Assembly, upon the use of certain emergency powers. Here, it seems, their judgement was at fault. They failed to realize that our political tradition pays far too much regard to the effect of a majority vote for emergency powers, which are exercised in opposition to such a vote, to afford any real safeguard. Emergency powers in fact can never be made a regular instrument of government; and during the past ten years, out of anxiety to avoid using them, the Government of India has

repeatedly been forced into positions which it is difficult to believe that its better judgement would have accepted.

The plan adopted in 1919 provided also that a Statutory Commission should be set up to review its working and make proposals for the future when a period of ten years had elapsed. This duty was performed by Sir John Simon's Commission which reported in 1930. They have found no way but to venture on another move forward. They propose that in the provinces the dual system shall be discarded and the work of government entrusted entirely to Ministers, though they make certain reservations in respect of law and order which might be interpreted as containing a lingering element of dyarchy, and they, too, rely on certain safeguarding powers entrusted to the Governor. They suggest a further enlargement of the electorates, but like their predecessors they are reluctantly driven to retain separate electorates for minorities. They think it unsafe to suggest fundamental changes in the position of the Central Government. With two matters of the first moment, which in the circumstances of the time could not be adequately handled in the Montagu-Chelmsford Report, they make a far-sighted attempt to deal. They propose to remove the control of the defence of India entirely from the Indian legislature and to treat it as an imperial issue; and they sketch the outlines of a federal scheme which should embrace both the British provinces and the Indian States in a Greater India.

At the close of 1930 His Majesty's Government summoned a Conference, with a large majority of representatives from India, to discuss the position. The federal idea found general favour; and there was a disposition on the part of the Indian members to press for the diminution of 'safeguards' and for the introduction of dyarchy (in spite of its condemnation by the Simon Commission) in the

Central Government. From the nature of its composition the Conference was better fitted to discuss general propositions than to debate detailed proposals, and eventually it adjourned and reassembled in the autumn of 1931. The Minorities Committee failed to agree on the various communal problems, and the Prime Minister again appealed for earnest efforts to be made in India to reach a settlement. The large Muslim minority regard the communal electorates as a vital defence against possible aggression by Hindu majorities: and, so long as an arrangement so wholly discordant with the democratic principle is retained in the constitution, India's political future cannot develop entirely on Western lines, nor can she attain to full and complete self-government.

There has not been much public recognition, however, of one other essential condition of success in the huge enterprise before us. It is one of the peculiar difficulties of the Indian problem that some of its crucial points are difficult ones to discuss with a desirable degree of freedom. Few people seriously believe that India can maintain a civilized and orderly government without a reasonable strength of British officials. But no Englishman can be compelled to serve in India. Thoughtful Indians will therefore do well to ask themselves how such a necessary element is going to be retained under the new conditions unless Indian educated opinion, expressing itself in and through the legislatures, manifests towards the British services a far greater measure of friendship and goodwill than it has shown in recent years.

Note.—See *Report of the Indian Statutory Commission* (1930): vol. 1, Survey, Cmd. 3568; vol. ii, Recommendations, Cmd. 3569.

Also, *Indian Round Table Conference Proceedings* (1931): Cmd. 3778, and Second Session (1932). These give references for voluminous Committee Proceedings. (Cmd. 3997).

Chapter V

THE ARMY

By GENERAL SIR GEORGE BARROW, G.C.B., K.C.M.G.

[General Sir George Barrow has had an exceptionally intimate acquaintance in peace and war with the Indian Army, in which he served in every rank from Lieutenant to General for forty-three years. He became Adjutant-General in India in 1923 and was subsequently Commander-in-Chief of the Eastern Command. He rendered distinguished service in the Great War, taking part in the capture of Jerusalem.]

INDIA is a triangular-shaped continent, bounded on the north by a barrier of immense mountain ranges, and on its other sides by the waters of the Indian Ocean and Arabian sea. Neither mountains nor sea constitute an impassable obstacle. Invading armies have poured, again and again, through the mountain passes; the maritime countries of Europe have entered, uninvited guests, at the portals of Calcutta, Madras, and Bombay.

Before the period of the Muslim invasions India had witnessed the coming of Alexander the Great, the establishment of the empire of the Guptas, and the reign of the Rajputs. During the tenth century, the Muhammadans first made their appearance in a series of raids into the Punjab. These incursions were followed by a succession of Muhammadan conquests and the rise and fall of dynasties in rapid sequence; such as those of Mahmud of Ghazni, Muhammad Ghori, the Slave Kings, the Khiljis in the thirteenth century; the Tughlak Sultans and Tamerlane in the fourteenth century; and in the fifteenth century the Afghan Lodi Kings who seized the throne of Delhi.

All these invasions, all these conquests brought indiscriminate slaughter, pillage, rapine, and ruthless cruelty

in their train. The lot of the unwarlike and peacefully disposed Hindus was one of misery untold and untellable.

In the year 1526 Babur, on his fifth attempt, became, in his own words, 'Master and conqueror of the mighty empire of Hindustan', and founded the famous Mogul Empire. He was succeeded by one of his sons, Humayun, and Humayun was succeeded by his son Akbar.

The Mogul rule was far sighted and beneficent compared with the rule of previous conquerors. Akbar saw clearly that co-operation, as opposed to fanatical ill-will, between Muslim and Hindu, was the only sure foundation for an Indian Empire. But the Mogul Empire was not destined to survive. Akbar's descendants were men of smaller mental stature. They fought among themselves; they fell to the intrigues of the harem; and Aurangzeb, who was a fine soldier and a versatile and talented king, reversed the wise and tolerant policy of Akbar. The Marathas under Sivaji, the Rajputs, the Sikhs rose in fierce resentment against the oppressions and indignities which were heaped on all non-Muslim subjects. The Mogul house which Akbar had endeavoured to build on the sure rock of co-operation and equity gradually crumbled into dust; for Akbar's successors had substituted a foundation of intolerance and persecution. In 1740, Nadir Shah of Persia defeated the Mogul Emperor, Muhammad Shah, at Karnal, and Delhi was sacked and gutted and the inhabitants given up to a nine hours' massacre. The Persian returned home with his treasure and his invasion was followed by an incursion of Rohillas, who annexed a large and fertile tract north of the Ganges. In 1748 Ahmad Shah Durani invaded India from Afghanistan, and Delhi was again sacked and its inhabitants massacred. In 1761 the Marathas raised a great force to overthrow the sovereignty of Ahmad Shah. They were

defeated near Delhi with immense loss which has been estimated at 200,000 dead. But Ahmad Shah's soldiers refused to remain in India; they hated the heat of the plains, and the Durani was obliged to return to the highlands of Afghanistan.

There is no room here to refer to the many other incursions, raids, internal wars, and internecine struggles which occurred previous to the establishment of British supremacy in India. Together with those already mentioned, they all have one common setting in ruined homes, ravished women, burnt villages, gutted cities, devastated harvests, massacred inhabitants, and destitute populations. Peace and security only came to India with the British. From that time down to the present day there has been no invasion of India by way of land or sea: no women and children slaughtered by the soldiery, no cities burnt or plundered, no countryside wantonly destroyed. Internal wars there have been—Assaye, Laswari, Sobraon, Chilianwala, the Mutiny; but there has been no unnecessary cruelty or destruction, no vengeance taken on the peaceful and defenceless, no extortion or persecution of the vanquished.

On 31st December 1600 Elizabeth granted a charter to 'The Company of Merchants trading into the East Indies'. In the course of time, and as a consequence of the Company's expanding trade and increasing political influence, armed forces were maintained for protective purposes in each of the presidencies of Bengal, Madras, and Bombay. In 1748 these local troops were placed under unified command, and Major Stringer Lawrence, 'the father of the Indian Army', was appointed Commander-in-Chief of all the Company's forces. Since that year the Indian Army has gone through a steady process of evolution and expansion. It was reorganized under Clive, and important

changes took place on the transfer of British India to the Crown in 1858, and also as a result of the Indian Mutiny. In 1895 the Presidency armies were abolished and the Army in India was divided into four commands under the Commander-in-Chief. Lord Kitchener carried out far-reaching modifications in the administration of the army and in the disposition and grouping of the troops. Finally, the lessons of the Great War have led to extensive alterations in the organization of the cavalry, infantry, and supply services; to the introduction of mechanization; and to the maintenance of effective air forces.

The Army in India consists approximately of 60,000 British troops and 150,000 Indian troops which are commanded almost entirely by British officers. (There are also certain Royal Air Force formations.) It is a highly trained and efficient army, comprising cavalry, artillery, infantry, armoured cars, and supply services organized in war divisions and brigades, covering troops, and units detailed for internal protection. It has two duties to perform: (*a*) to protect India from foreign aggression (external defence); (*b*) to secure peace within India's own borders (internal security). When we consider that the proportion of fighting men to civilians is 1 in 1,280, the size of the army would not appear excessive, having regard to its dual responsibility.

As regards external defence, the Simon Commission Report says—'for a very long time to come, it will be impossible . . . to dispense with a very considerable British element, including in that term British troops of all arms, a considerable proportion of the regimental officers of the Indian Army, and the British personnel in the higher command'. The reason for this statement is that the effective defence of India is an Imperial question, in which Empire communication, Empire trade, and the general

position of India in the East are affected. Altogether, the issues are far too vital to permit of any risks being taken in respect of the composition of the forces which are maintained for the purpose of securing India from invasion. Excepting the Canadian frontier, which may be safely left out of consideration, the North-West Frontier of India is the obvious land frontier in the Empire which is open to attack. Every previous conqueror of those Central Asian lands over which Soviet Russia now holds sway, from Alexander the Great to Ahmad Shah Durani, has entered India by the passes which lead down to the North-West Frontier. The defence of this frontier cannot at present be left to an Indian Army, administered and directed by a popularly elected Indian Government.

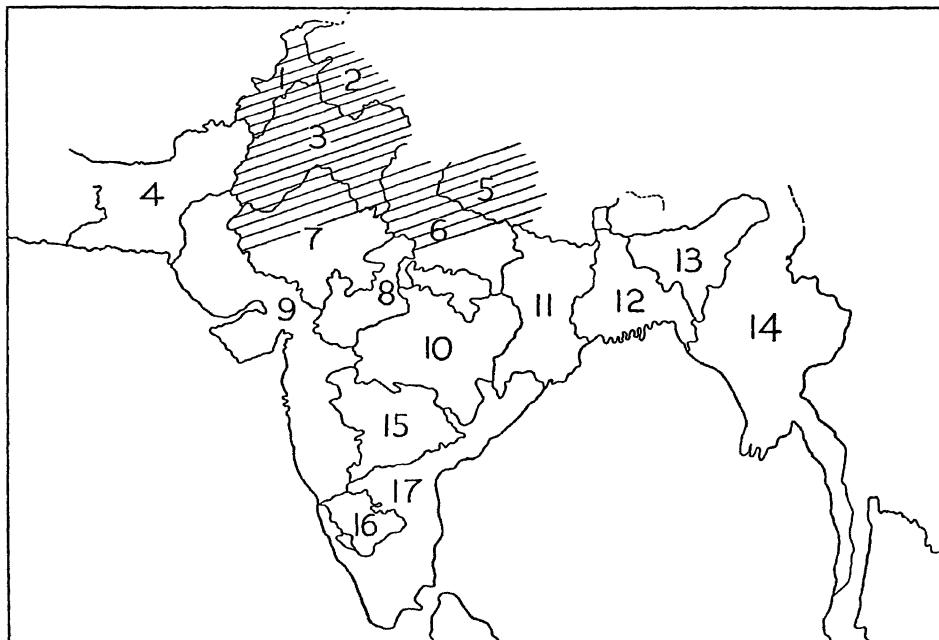
Next, as regards internal security. Approximately 35,000 British and 30,000 Indian troops are the minimum number considered necessary to secure peace within India's own borders; i.e. more than half the total number of British and one-fifth of the Indians of the entire army. This minimum figure has not been materially altered since Lord Kitchener was Commander-in-Chief, when it was fixed after consultation with the provincial governments. The reason given in the Commission Report (Vol. i, p. 95) for a greater number of British than Indian troops being ear-marked for internal security is that 'the British soldier is a neutral, and is under no suspicion of favouring Hindus against Muhammadans, or Muhammadans against Hindus', and 'as the vast majority of the disturbances which call for the intervention of the military have a communal or religious complexion, it is natural . . . that the intervention which is most likely to be authoritative should be that which has no bias, real or suspected, to either side'. But there is another and equally cogent reason. Not only is the British soldier impartial; he preserves his temper under

extreme provocation, he does not panic, and he is armed with prestige, as a representative of that Power which has given India a security from dangers, both within and without, which she has never known in her previous history.

In addition to these duties of defence and security the Army in India has frequently been employed for Imperial purposes. It has furnished contingents for operations in Ceylon, Manila, Macao, Java, Bourbon, Egypt, Abyssinia, the Sudan, China in 1865, 1900, and 1926, and South Africa. In all these instances the call was made on India because she was geographically much more favourably situated for the dispatch of troops to the scene of action than the other garrisons of the Empire, and it was made when the horizon had been cloudless and no danger threatened the country from any direction. The Imperial Exchequer paid all the expenses connected with the maintenance of the troops, including their pay, and the Indian revenues benefited accordingly.

During the Great War India rendered immense help to the Empire. When the war was only four months old, she had provided 21 cavalry regiments, 69 infantry battalions, and 204 guns. Her total contribution during the war was 1,302,000 men, 173,000 animals, and 3,692,000 tons of supplies and ordnance stores.

It will be apparent, from what has been said above, that the presence of British troops in India is essential, both for external defence and to internal security. This fact alone presents a difficult obstacle in the path of India's progress towards self-government or Dominion status, if, as expressed by the Simon Commission, 'a completely self-governing India must be in a position to provide itself with armed forces fit to undertake the tasks which armed forces in India have to discharge'. India is not at present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COMPOSITION OF THE INDIAN ARMY, 1929

More than 85 per cent. of the Indian army are recruited from the area shaded in the map on the opposite page.

Ref.	*Territory.*	*Number.*	*Ref.*	*Territory.*	*Number.*
1	N.W. FRONTIER PROVINCE	5,600	10	CENTRAL PROVINCES	100
2	KASHMIR	6,500	11	BIHAR AND ORISSA	300
3	PUNJAB	86,000	12	BENGAL	Nil
4	BALUCHISTAN	300	13	ASSAM	Nil
5	NEPAL	19,000	14	BURMA	3,000
6	UNITED PROVINCES	16,500	15	HYDERABAD	700
7	RAJPUTANA	7,000	16	MYSORE	100
8	CENTRAL INDIA	200	17	MADRAS	4,000
9	BOMBAY	7,000		MISCELLANEOUS	1,900
				TOTAL	158,200

in a position to provide these armed forces out of her own resources; nor does it seem probable that she will be able to do so within a measurable distance of time, because, to quote again from the Simon Commission Report, 'The plain fact is that the formation of an Indian National Army drawn from India as a whole, in which every member will recognize the rest as his comrades, in which Indian officers will lead men who may be of different races, and in which public opinion will have general confidence, is a task of the greatest possible difficulty, and the Indian intellectual has, as a rule, no personal longing for an army career.' The truth of the above statement is borne out, in a marked manner, by the number of recruits which are now furnished annually by the different provinces. Excluding the Gurkhas from Nepal, of the total number of combatants in the Army, 66 per cent. come from the Punjab and the North-West Frontier Province, 11 per cent. from the United Provinces, and 23 per cent. from the whole of the rest of India put together, Bengal's share being nil (see the schedule on p. 77). The recruiting figures for the Great War show the position even more clearly. Bengal with a population of 45 millions provided 7,000 combatants, while the Punjab, with a population less than half the size, provided 350,000 recruits. The Punjab and the United Provinces found three-fourths of the total number of combatant recruits throughout British India. Herein lies the great hindrance to the formation of a National Army: the military traditions and instincts do not pervade all India in a like degree. The martial races inhabit certain portions of India while the inhabitants of other portions are at present either deficient in or wholly devoid of the martial spirit. The latter would dominate any political assembly or machinery, and the former would not readily submit to their ascendancy.

There are also 20,000 Gurkhas who are recruited from outside India. Their military value is well known; they compose some of the finest fighting material of the Indian Army. No Gurkha would follow a leader whom he did not respect as a soldier. The martial races of India are proud of their traditions, proud of their military prowess and contemptuous of the non-fighting classes, to an extent which is hardly realizable in European countries, where these distinctions in fighting values do not exist.

The Simon Commission Report states—'the obvious fact that India is not . . . a single nation is nowhere made more plain than in considering the difference between the martial races of India and the rest'. The corollary of this unequal distribution of martial qualities, and their concentration in practically one part of India is that the formation of a National Army is only possible when two stages in nationalization have been reached. Firstly, the races of India must assimilate in the sense that the German races—Prussians, Bavarians, Saxons, Hanoverians, Wurtembergers—are assimilated. Secondly, Indians must learn to command and be commanded by men of different origin and with the same mutual respect as is the case in the British Army, where English, Scotch, Welsh, and Irish command and are commanded by each other, free from all bias, favour, mistrust, or affection. There can be no genuine national spirit where the military power is confined to a section of the people.

But the apparent remoteness of the goal has not deterred the British and Indian Governments from taking the first steps of the many which will be required in order to cover the distance. In 1918 Indians became eligible to hold the King's Commission. The momentous enhancement of the military career which results from this decision followed, in the first instance, 'as an appropriate and just recognition

of the loyalty and gallantry which had been displayed, by all ranks of the Indian Army during the Great War'. It was also the inevitable consequence of the fact that the highest appointments in the civil branches of the public service were open to Indians, and, generally, of India's political evolution. It should be understood that before the war the Indian officers received only a commission signed by the Viceroy. A commencement was made with the bestowal of the King's Commission on a number of Viceroy-commissioned Indian officers as a reward for war services, and was followed by the reservation of a certain number of vacancies at Sandhurst, Woolwich, and Cranwell, for Indian candidates. This number of vacancies has been increased since the start was made and in 1930 twenty-one Indians were admitted to the Royal Military College, the vacancies offered at Woolwich and Cranwell being nine and twelve respectively. Not all who enter are successful in passing out. For instance, up to the end of 1928 there were 112 admissions and only 77 received commissions. The pace at which Indianization proceeds is conditioned by the efficiency of the results obtained; and the primary factor governing the rate of progress must obviously be the number of Indians who qualify to receive commissions. Both civil and military authorities have done their best to induce a greater number of suitable candidates to come forward, and their efforts are meeting with a certain degree of success. Eight units were selected for Indianization as a beginning. As the number of cadets who pass through Sandhurst is now more than sufficient to replace the normal wastage in these eight units, the scheme requires to be extended, as it was always intended should be the case, in due course. Consequently, the next step, and it is a big one, is towards the Indianization of a complete division. The period within which a unit can

be completely Indianized in its establishment of officers is dependent on the time which it takes an officer normally to rise from the rank of subaltern to the command of a regiment, i.e. not less than twenty-five years. It is evident therefore that the time required to Indianize entirely a whole division, dependent as it is on this factor of promotion through the regimental grades, as also on the number of efficient Army candidates who are forthcoming, must be considerable.

The Government of India has given a practical illustration of its determination to assist the course of Indianization by the establishment of the Dehra Dun College which was opened by the Prince of Wales in 1922. The object of the College is to give an education, at a moderate charge, to Indian boys who desire to obtain a King's Commission through the Royal Military College. It is also designed to familiarize the boys with the habits and modes of life which it will be necessary for them to follow in their future military career. The school not only provides literary education, but combines a scientific system of physical training with the development of character. The experiment has so far been entirely successful.

Another important move towards Indianization has been the recent decision of Government to inaugurate an Indian Sandhurst, and a Committee has lately been sitting to work out the plans and details. Its report, of outstanding importance, was published in September 1931.

It is well to remember that the 20,000 Gurkhas cannot be Indianized.

The Indian Army is composed of men of many different classes, holding different beliefs, having different customs, speaking different languages. It is obvious, therefore, that the command of forces containing such diverse elements demands special qualities of tact, impartiality, and

acquaintance with the idiosyncrasies of the various castes and classes on the part of the regimental officers. Consequently the responsibility which lies before the young Indian officers of the Indianized units is a heavy one. In the words of the late General Lord Rawlinson, 'they will have in their hands not only the lives of their men, but also the task of maintaining untarnished the high and ancient traditions of the regiments to which they are appointed. . . . Their success or their failure will mean much to India.'

Approximately two-thirds of the men serving in the Army are Sikhs and Hindus, and one-third are Muhammadans.

The expenditure on the army and air forces in India just before the war (1913–14) was 290 millions of rupees. In 1922–3 the expenditure had risen to over 660 millions of rupees. This great increase was due to economic causes which were the outcome of the war, the consequent enhancement of rates of pay for all ranks and the adoption of a higher standard of comfort for the Indian soldier in the form of better barracks, greatly improved hospitals, issue of free rations, and in several other directions. In 1923 a number of economies were effected on the recommendations of the Inchcape Committee and expenditure was reduced to 590 millions of rupees. This reduction was mainly achieved by cutting down the strength of the Army by a number of British units, cavalry and artillery, and by lowering the establishment of British and Indian infantry battalions.

In 1928 the Commander-in-Chief in India undertook to pay and administer the Army in India, including the departments of maintenance and supply at a cost of 550 millions of rupees, provided that the military authorities were relieved of certain financial controls. The Government of India accepted the proposal and the 'Army Con-

tract System', as it is called, was introduced. By this arrangement a lump sum of 550 millions of rupees (£41·3 million sterling or 201 million dollars) was handed over to the Commander-in-Chief, who is responsible for its expenditure in the best interests of the Army. The system has been so successful that it has been found possible to reduce the sum by 30 million rupees during the last three years.

It is often objected that the expense of the Army represents an excessive proportion of the expenditure of government in India. The figure usually quoted, 43 per cent., is, however, misleading, as it is based only on the central budget, which nowadays is separate from the provincial budgets. The correct proportion is approximately a quarter of the central and provincial budgets combined.

Every effort has been made of late years to keep the Army up to date in armaments and equipment. It is largely mechanized. But, on account of the varied nature of the country in which troops may be required to operate, especially the mountainous country of the land frontier, and of the requirements of internal security, it is not desirable to mechanize the fighting troops and their transport to the same extent as is done in the case of European armies.

There are, in addition to the Regular Army, two other military forces in India, viz. the Auxiliary Force and the Indian Territorial Force. The Auxiliary Force is the counterpart of the pre-war Volunteer Force. Its membership of 33,000 is limited to European British subjects, and it is recruited on a purely voluntary basis. Military service in the Auxiliary Force is local, and the form of training varies in the different units so as to accord with local conditions. It comprises all branches of the Service, infantry battalions, railway battalions, machine-gun companies, armoured cars, batteries of artillery, and mounted corps. Many of the units are very efficient. The Auxiliary

Force has justified its existence on many occasions since it was raised, and its presence is invaluable, especially in those wide and difficult tracts of country where few regular units are stationed, and also in the provincial capitals.

The Indian Territorial Force was started in 1923 in order to meet the desires of the Legislature that Indians who did not wish to adopt a profession of arms might still find an opportunity to give expression to their martial instincts. It is, in fact, one of the aspects of the Indianization of the military services. It is a second line to, and a source of reinforcement for, the regular Indian Army. It is embodied, for purposes of training, for short periods annually. Its total strength is about 22,000.

The Indian State Forces are those which are maintained by the rulers of the Indian States. They number about 45,000 men of all arms. The majority are well armed and trained. The Indian Princes have invariably offered their troops in emergencies for the service of the King Emperor, and Indian State Forces have served with distinction in Egypt, China, France, Palestine, Mesopotamia, and elsewhere.

Service in the Indian Army is popular and there has never been any lack of recruits. The profession of arms has always been held in honour among the martial races. And the Indian Army merits the honour and respect of all the classes and creeds that inhabit the sub-continent. In war it has never failed to secure victory by reason of its valour and discipline: in peace, it has never failed to carry confidence by reason of its discipline and comradeship. It has resisted all the attempts which have been made of recent years to seduce it from its allegiance to the British Crown. It has justly earned the gratitude and the respect of both the British and the Indian peoples.

Chapter VI

THE SERVICES

By L. S. S. O'MALLEY, C.I.E., M.A.

[Mr. L. S. S. O'Malley is one of a long line of members of the Indian Civil Service who have made valuable contributions to English literature in India. The latest of these, his book on his own Service, has filled a serious gap in that literature. Mr. O'Malley has also written the history of Bengal, Bihar, and Orissa under British rule, as well as a geography of those provinces. He was the Superintendent of the Bengal Census in 1911.]

IT was observed by John Stuart Mill in *Representative Government* that the proper functions of governments are different in different states of society and are more extensive in a backward than in an advanced state. The truth of this saying is exemplified in British India, where the activities of Government cover a wider field than in many more highly developed countries because of its tutelary position towards a population vast in numbers but economically and educationally backward. The recognition of the principle that the functions of a government include the moral and material progress of the people committed to its charge, and the lack or inadequacy either of private enterprise or of private capital, have led to the creation of State Services with a wide range of responsibilities. Many are not merely regulative but to a large extent creative, i.e. those who serve in them are not confined to the application of fixed and perhaps rigid rules in the conduct of the administration, but themselves initiate works of public utility or measures of public benefit.

At the same time, the British Government has been in a peculiar position owing to its heritage of a past system of administration. Administrative functions, to which there is no parallel in Europe, notably in regard to the

assessment of revenue and the administration of the land, have devolved upon it as the successor of the Mogul Government. In addition to this, the absence until comparatively recent times of local self-governing bodies, of the county council and municipal type, controlling local organizations, has necessitated a unified State control of the public services. The combined result is the existence of an unusually large number of State Services with a remarkable diversity of duties but a general unity of control. The police force, for example, is not controlled, as in the United States and in Great Britain outside London, by hundreds of local bodies, but is a unified State Service working under a centralized and co-ordinated system. Medical relief does not depend on voluntary agencies or municipal authorities but is organized by another State Service, the members of which staff many hospitals, where even the compounders are in Government service. Government, again, owns and directs most of the railways, and constructs and maintains great works of irrigation. It not only has an inspectorate for educational institutions, but itself administers and supports colleges and schools. It is the greatest employer of labour in the country and its employees represent many professions—judges and magistrates, police officers, irrigation, civil and railway engineers, doctors, veterinary surgeons, forest officers, agricultural experts, professors, geologists, botanists, meteorologists, and archaeologists.

An outstanding feature of the Services is the very large extent to which their personnel is Indian. The right of Indians to take part in the administration of their country has been recognized for a long time past. The Charter Act of 1833 specifically enacted that they were not to be debarred by reason only of race, religion, or colour from holding any place, office, or employment under the East

India Company. The Directors accordingly declared that fitness was to be the only criterion of eligibility for public office. The one thing lacking, in their view, was a sufficient supply of qualified Indians, and they looked to education as the means of qualifying them. Every design for their improvement was therefore to be promoted, whether by conferring on them the advantages of education or by diffusing the treasures of science, knowledge, and moral culture.

In pursuance of these orders, the Government of India established colleges and schools, from which to draw a supply of educated men for the public service, and it did not confine its efforts to the literary side of education. It founded medical colleges for the training of medical students; in view of the necessity of training engineers in the country in which they were employed, it set up civil engineering colleges; it even established universities during the turmoil of the Mutiny.

It was further announced by Queen Victoria in her famous proclamation on the transfer of the government of India to the Crown that it was her will that 'so far as may be, our subjects of whatever race or creed be freely and impartially admitted to office in our service, the duties of which they may be qualified by their education, ability, and integrity duly to discharge'. In fulfilment of this pledge, the Government has steadily, though at times perhaps a little slowly, pursued the policy of restricting the European element in the administration, subject to the proviso that a strong, and sometimes even a predominating, proportion of Europeans should be retained in certain Services, such as the Forest Service, in which scientific or technical knowledge is essential, and in Services like the Indian Civil and Police Services where the exercise of particular responsibility is equally essential.

The latter two Services are known as 'Security Services' because, being charged with the organization and direction of the general administrative system, the security of the country largely depends on them.

The working of this policy has brought about a progressive decline of Europeans and a progressive increase of Indians in the composition of the Services. As far back as 1904 out of 26,908 men drawing pay of £60 to £800 a year 16,283 were Indians, 5,420 were Eurasians (now known officially as Anglo-Indians), and 5,205 were Europeans; out of 1,370 men who held higher posts carrying pay of over £800 1,263 were Europeans, 92 were Indians, and 15 were Eurasians. Commenting on the figures, the then Viceroy, Lord Curzon, pointed out that to rule over 230 millions of people, the British Empire employed less than 6,500 of its countrymen and 21,800 of the inhabitants of India itself.

'It reveals', as he said, 'a European system of government entrusted largely to non-European hands: what is called a subject country, though I dislike the phrase, administered far less by the conquering power than by its own sons; and, beyond all, it testifies to a steady growth of loyalty and integrity on the one part, and of willing recognition of these virtues on the other, which is rich with hope for the future.'[1]

The latter line of thought may also be traced in the remarks made twenty years later by a distinguished writer who has no official connexion with India, Professor R. Coupland.

'One of the greatest services—perhaps the greatest—which Englishmen have done for India has been the training which they have given to Indian officials in the methods and morals of public service. Consciously or unconsciously, merely through being associated with Englishmen in the same administrative body, working side by side with them on a footing of complete equality, sharing equally their

[1] Sir T. Raleigh, *Lord Curzon in India* (1906), pp. 146–7.

pride in what the Service has done for India and in their hope of what it may yet do, many of them have acquired an *esprit de corps* and a sense of public duty the attainment of which by any other means must have been a long and difficult task.'[1]

Of late years the Indianization of the Services has proceeded at an accelerated rate. Even in the Indian Civil and Police Services the Indian element is being steadily augmented, and both Services are to be half Indian and half British within fixed terms of years—the Indian Civil Service by 1939 and the Indian Police Service by 1949. In 1929, out of a total of 5,250 men in the All-India Services and in the Central Services of a parallel status, one-third were already Indians; year by year the number of Europeans is being reduced in the higher ranks, while Indians have an almost complete monopoly of the lower ranks. Taking into account all the public services and also the size of the population—2½ times that of the United States—the number of British officials in the country is insignificant. A mere recital of figures, however, fails to give such a clear impression as the remarks made by Lord Curzon in 1909:

'The Englishman proceeding to India may expect to see his own countrymen everywhere, and above all in the offices and buildings of Government, in the law courts, and on the magisterial bench. As a matter of fact, except in the great cities, he will rarely come across an Englishman at all. I once visited a city of 80,000 people in which there were only two official Englishmen, both of whom happened to be away.' [2]

The writer of this chapter was himself once in charge of a district, extending over 2,600 square miles and containing

[1] *Report of the Royal Commission on the Superior Civil Services in India* (1924), p. 123.

[2] Lecture on 'The Place of India in the Empire' delivered before the Edinburgh Philosophical Institution, 1909.

a population of over a million, in which there was only one other British official.

The Services may be placed in different categories according to the authorities by which their members are appointed and according to those under which they serve. The main classification is into All-India and Provincial Services. There are only four All-India Services, viz. the Indian Civil Service, the Indian Police Service, the Indian Forest Service (outside Bombay and Burma), and the Irrigation Branch of the Indian Service of Engineers. Their members are appointed by the Secretary of State for India, and, as the name implies, are liable to serve anywhere in India: in practice transfers from one province to another are rare because languages and administrative practices vary from province to province. Members of the Provincial Services on the other hand are appointed by the Governments of the provinces, by which also they may be dismissed, whereas members of the All-India Services can be dismissed only by the Secretary of State in Council. Below the Provincial Services, and at the bottom of the hierarchy of Services, there are various Subordinate Services, which are also recruited locally and are sometimes divided into upper and lower branches. Members of both the Provincial and Subordinate Services serve only in the provinces to which they belong.

The other distinction is between the Central Services and those which work under provincial Governments. The latter include the great majority of the public services; the former are comparatively few and are confined to departments directly administered by the Central Government, such as railways, posts, and telegraphs.

The general system of administration in British India is based on the subdivision of territory into charges of decreasing size with a descending scale of offices. Each

administrative area is in charge of an officer who is under the control of another officer of superior authority, and the whole structure may be compared to a pyramid with Government at the apex. The working of the machinery of administration depends on the constant supervision of lower by higher officers, whose control is exercised in various ways. There are periodical and surprise inspections; there is an extensive right of appeal against executive as well as judicial orders; powers are limited according to the degree of responsibility attaching to each office, and there is a consequent necessity for obtaining the sanction of higher authority. There is a regular gradation of offices, and there are different grades in different services with promotion from one to another.

All the Services have one feature in common, viz., that superannuation takes place at an earlier age than in Europe. Members of the Indian Civil Service must retire when they have had thirty-five years of service unless they happen to be holding the office of head of a province, High Court Judge, or Member of an Executive Council. In other Services a man must retire shortly after he passes fifty-five years unless he is of such exceptional merit that his retirement would be against the public interest. Extensions of service are rarely granted, for very few men are indispensable. In consequence of these rules, the public services are staffed by men whose eye is not dimmed nor their physical force abated, and they contain no old men. The rules ensure that, subject to a high standard of efficiency, there is a steady progression in rank and pay; and preclude the dispiriting influence of hope deferred by long-delayed promotion. The system, involving retirement at an earlier age than is customary in the West, naturally increases the cost of the pension roll to the State, but on the other hand it makes for energy and efficiency,

both because of the infusion of fresh blood in the administrative corps and because of the well-known facts that Indians age more rapidly than Europeans and that the latter after long residence in a trying climate are apt to feel its effects and lose vigour.

The Indian Civil Service has pride of place among the Services because of its past history and present position. The system of civil administration in India has been built up by it, and it is still the driving wheel of the machinery of government. It is the oldest Civil Service in existence: indeed, the term Civil Service originated with it. It had its origin in the body of men who carried on the trade of the East India Company and who were known as its civil servants in distinction from its naval and military officers. When the Company acquired political power and territorial empire, its mercantile employees became administrators, and the term Civil Service acquired its present meaning. By the beginning of the nineteenth century they were, in the words of the Marquess Wellesley, no longer the agents of a commercial concern, but helped to administer an empire and filled the important offices of magistrates, ambassadors, and provincial governors.

The Service is now a *corps d'élite*, much reduced in numbers during recent years owing to the transfer to Indians, outside the cadre, of posts which its members formerly filled. It consists of only about 1,000 men, who are responsible for the general direction and control of the civil administration. A selected few become provincial governors; others, little less highly placed, are Members of the Executive Councils of the Government of India and the provincial governments; some are Secretaries to the different governments; others are Judges of High Courts at provincial capitals or Judges in the interior; the majority are engaged in district work.

Each province is divided into districts, the executive heads of which are called District Officers; and the districts, except in Madras, are grouped in varying numbers, generally four to six, to form Divisions under officers called Commissioners. Each district is usually parcelled out into smaller administrative areas called subdivisions, each under an officer subordinate to the District Officer; and at the district head-quarters each department is under an officer similarly subordinate to him. Responsibility is concentrated in the District Officer to an extraordinary degree. Not only has he to conduct the ordinary administration of the area in his charge, including the collection of the revenues which furnish the sinews of government, but he is called on to deal with any emergency affecting the welfare of the people of his district, a million on the average. The light in which the latter regard the District Officer is reflected in two picturesque titles by which the rural administrative officers of Government are addressed —'incarnation of justice' and 'cherisher of the poor'. They look to him not only for protection against oppression by their fellow-men and for the redress of their wrongs, but also for relief from the distress caused by visitations of nature, such as famines, cyclones, and even clouds of locusts. He is not a sedentary officer, learning of their needs and grievances only from reports and representations submitted to him in his office, but he moves about his district, going from village to village and coming into direct contact with their inhabitants. Under him is a staff of officers of the Provincial Civil Service engaged in magisterial and other work, who belong to what is called the Executive branch of the Service. Another branch is judicial, and from it are drawn the officers who administer civil justice under the District and Sessions Judges.

Members of the Indian and Provincial Civil Services

are also employed in a special branch of work known as Survey and Settlement, which includes a survey of the land of every landlord and cultivator, the preparation of maps, and the compilation of a record of tenures and landed rights. One example of what this involves will suffice. In Bihar, with an area 6,000 square miles greater than that of Scotland, field maps and a record of rights have been prepared for 7 million holdings and 41 million plots of land at a cost of only tenpence an acre, and the whole agricultural population has been put in possession of reliable title-deeds.

The Political Department forms a separate Service recruited from the Indian Civil Service and officers of the Indian Army. The work which devolves upon it is known as 'political' in the official language of India, but 'diplomatic' is more appropriate; for its members serve as the representatives of the Government of India in countries with which it has diplomatic relations, such as Afghanistan, Nepal, the Persian Gulf, &c., and also as Political Officers and Residents in the States of India, where they advise and assist the Princes in any matters on which they may be consulted and act as intermediaries between them and the Government of India. The Political Department has produced a long series of eminent men whose names are regarded with affectionate esteem in the States,[1] and it has a splendid record of foreign service, discharged, often at the hazard of life, under difficult and dangerous conditions.

Its officers are also employed in the civil administration of districts on the North-West Frontier, where they act as Wardens of the Marches. Here a special problem is presented by the raids of the frontier tribes, which can muster 130,000 fighting men equipped, as has been said, with modern rifles and ageless savagery.

[1] *Report of the Indian States Committee* (1929), p. 38.

'Few people in England', writes Sir Hamilton Grant, a former Chief Commissioner of the North-West Frontier Province, 'reading of raids on the north-west frontier of India realize the full horror of these outrages. What generally happens is that in the small hours of the morning a wretched village is suddenly assailed by a gang of perhaps 50, perhaps 200, well-armed raiders, who put out sentries, picket the approaches, and conduct the operation on the most skilful lines. The houses of the wealthiest men are attacked and looted; probably several villagers are brutally murdered—and probably one or two unhappy youths or women are carried off to be held up to ransom. . . . Our officers are untiring in their vigilance, and not infrequently the District Officers and the officers of their civil forces are out three or four nights a week after raiding gangs.'[1]

Coeval with the Indian Civil Service is the Indian Medical Service, which had its origin in the doctors sent out to the trading stations of the East India Company to attend on its servants, civil and military. They were first organized in a graded service in 1763. Till 1896 there were three medical corps attached to the three presidential armies of Bengal, Madras, and Bombay, and as the latter were amalgamated in the Indian Army, the former were united in the Indian Medical Service. The Service has dual functions. It is primarily a military service, for it forms a reserve of medical officers on which the Indian Army has first call in time of war; its value as such was abundantly proved in the Great War. It is also engaged in civil medical work, its officers serving as Civil Surgeons in the districts and holding charge of hospitals and medical colleges or appointments in connexion with them. All must have a period of duty in the Indian Army before filling civil appointments. The world of science, no less than the art of surgery, has been enriched by the Indian Medical Service. Many famous scientists have belonged to it, and among its retired members are Sir Ronald Ross

[1] *Essays in Liberalism* (1922), pp. 94–5.

and Sir Leonard Rogers, whose researches in connexion with malaria, cholera, and leprosy, have earned them an international reputation.

The Service, which was formerly recruited by competitive examination in England and is now filled by nomination, has been materially affected by Indianization. In the whole of British India there are now only 200 Europeans in the Civil Medical Departments out of a total of nearly 6,000 medical men; and the Indian Medical Service has been reduced to the number of men required to form a medical reserve for the Indian Army and to provide medical attendance for European members of the public services and their families.

The second of the 'Security' Services is the Indian Police Service, another small Service consisting of a little under 700 men, with whom rests the control of a force of over 198,000 men. A fuller account is given in Chapter VII on Law and Order. It is organized on a provincial basis, the force in each province being under an Inspector-General. The district units are grouped in ranges under Deputy Inspectors-General, and each district is under a Superintendent, whose position corresponds to that of a Chief Constable in the West; with this difference however, that the latter may only have had a comparatively short training in police work before his appointment, whereas the Superintendent in India has adopted professional police administration as his life career and has had many years experience as a police officer. In subordination to the Indian Police Service is the Provincial Police Service composed of officers of lower rank, which is almost exclusively Indian, as are also the rank and file. Altogether there are less than 600 British officers and about 800 British sergeants, the latter almost entirely employed in the provincial capitals. The great majority of the force

belong to the civil police, a constabulary armed only with batons. A body of military police is employed on the frontiers and in Burma; and there is also a very small armed reserve at each district head-quarters.

The Indian Police Service has had to contend with many difficulties. The strength of the force is relatively very small—less than one man per 1,000 of the population—and the public is inclined to be apathetic in its support. Although they appreciate the maintenance of order, Indians appear to have a prejudice against the punishment of disorder and are slow to assist in the suppression and detection of crime. The task of officers of the Service has, moreover, been complicated by a tendency to corruption in the subordinate ranks, and it has not always been easy to make them realize their position as the servants and not the masters of the public. The sustained efforts of the officers have, however, resulted in an improvement in morale, and it is incontestable that they have instilled into their men a fine sense of discipline, which in recent years has been proof against both temptation and terrorism, and has not been shaken by the grievous loss of life due to assassination by revolutionary fanatics. It would be difficult to speak too highly of the restraint which the police have shown generally during the civil disobedience movement, and of their staunchness and courage under the gravest provocation and even the insidious torture of social persecution.

India is said to stand second to no other country in the world in the achievements of its engineers, and she owes her reputation not only to the constructional wonders of her Railway Engineers, but also to the great feats of the Irrigation Branch of the Indian Service of Engineers. The fruits of their skill are seen in great irrigation works, which have secured the country which they serve against

the visitations of famine or scarcity. The latest of these is the Sukkur Barrage, stretching for a mile across the Indus, which affects over eight million acres. This is only one of many great works which spread plenty over a dry and thirsty land. 'Britain', it was said about thirty years ago, 'makes a new Egypt in India every year and the world takes no notice.' This rather overstates the case, but certainly Egypt is dwarfed by the irrigated area in India: the country under cultivation and human habitation in the Nile Valley, the Delta, and the Oases is less than one-third of that supplied with water by State irrigation works in India. The actual area under irrigation is 44,000 square miles and there are 75,000 miles of canals, or nearly 33,000 miles more than the total length of the railways.

The Irrigation engineers were formerly combined with the engineers engaged in the construction of roads and buildings in a common service called the Public Works Department. All were trained from 1871 to 1906 at the Royal Engineering College at Cooper's Hill in England, but since the latter year engineers have been obtained in the open market, and the roads and buildings branch has for some years past been a separate department.

The fourth All-India Service is the Indian Forest Service, which was founded in 1864 and owed its development largely to two German forestry experts, Sir Dietrich Brandis, the first Inspector-General, who held that office for nineteen years, and his successor, Mr. W. Schlich. The State forests, for the conservation of which the Service is responsible, cover 250,000 square miles and yield a revenue of £2,000,000; but revenue is not the only or even the main consideration, for the guiding principle of forest administration, as laid down by the Government, is that the sole object with which State forests are administered is the public benefit.

The Agricultural Department has also done work of solid and permanent value in developing India's natural resources and stimulating its greatest industry—agriculture—though the number of trained workers in this vast field is all too small. In particular, agricultural research has done much to improve the quality and value of the crops; its chief centre is the Research Institute at Pusa. Improved types of wheat, rice, and cotton, which the Department introduced, are now grown on millions of acres and give a return valued at £1 an acre more than local varieties; the cotton in one province alone has increased the cultivators' income by half a million sterling, and the supply of selected jute seed to the cultivators of Bengal has resulted in a gain to them of £400,000 a year.

The Education Service had its inception in a dispatch, said to have been drafted by John Stuart Mill, which the Directors of the East India Company issued in 1854. Recognizing that the education of the people was the duty of the State, and that it needed fuller development in India, they formulated means to secure its advance, including the establishment of universities and the creation of separate Departments of Education in each province. Departments were accordingly established in the following year, under heads designated Directors of Public Instruction, and they have since then directed the educational activities in each province. The Service supervises the main branches of education other than that given in universities, i.e. collegiate, secondary, and primary, as well as technical. Its officers are engaged in teaching in Government educational institutions and in administrative work as an inspecting agency for colleges and schools. There are approximately 1,500 persons in the higher and 11,000 in the lower grades, nearly all being Indians.

It is now nearly eighty years since what Lord Dalhousie

called 'the three great engines of social improvement' were introduced into India, i.e. railways, uniform postage, and the telegraph. The length of railways has now risen to 42,000 miles, on which over 600 million passengers are carried annually. The State directly manages nearly 19,000 miles and employs 473,000 men, the superior staff numbering 1270. There are 100,000 miles of telegraph lines and over 450,000 miles of telegraph wire; the number of letters and other articles passing through the post is 1,400 millions a year; and the postal staff exceeds 100,000 persons under Postmasters-General in the provinces, with the Director-General of Posts and Telegraphs as supreme head for all India. The efficiency of the postal system equals, if it does not surpass, that of Great Britain, and is regarded as one of the marvels of the British Raj by the Indian masses, to whom the certainty and dispatch with which letters and money-orders reach the remotest villages are a source of never-ending wonder.

The word Survey is applied to more than one Service connected with scientific and other research, such as the Botanical Survey of India, the Geological Survey of India, and the Archaeological Survey of India; but there is one Service which has a right to it *par excellence*, and without adjectival qualification, and that is the Survey of India.

This Service dates back to the appointment of the famous geographer James Rennell, in 1764, as Surveyor in Bengal and three years later as Surveyor-General. The first Superintendent of the Trigonometrical Survey. Colonel Lambton, was appointed in 1818, and he was succeeded five years later by Sir George Everest, whose name was given to and is perpetuated by the highest mountain in the world, the pre-eminence of which was first discovered in the offices of the Survey in Calcutta. The superior staff of the Survey consists of officers of the

GROWTH OF
POSTAL TRAFFIC
SINCE 1884
IN MILLIONS OF ARTICLES
Millions
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
84-85
89-90
94-95
99-00
04-05
09-10
14-15
19-20
24-25
25-29

Royal Engineers and of the Indian Army, who have trained a staff of Anglo-Indians and Indians to assist them as scientific surveyors. Their mapping work extends not only over India but also to countries beyond the frontier, where it makes a thrilling chapter in the romance of exploration.

It is not possible to make more than a passing reference to other scientific Services. Mention should not be omitted of the valuable work done by the Geological Survey in economic geology and the development of India's mineral resources; and of the services which the Meteorological Department has rendered to aviation by the study of upper air currents, and to the public at large by the issue of forecasts of the annual seasonal rainfall and of timely warning of impending cyclones. Further, there is the record of the Archaeological Survey in investigating and conserving the monuments of India's past and in exploring the remains of remote ages. Its recent excavations in the Indus valley, which have brought to light a hitherto unsuspected civilization dating back to 4000 B.C., are one of the triumphs of modern archaeology.[1]

[1] For a detailed account of these highly important discoveries see *Mohenjo-Daro and the Indus Civilization*, edited by Sir John Marshall (Probsthain), 1931.

Chapter VII

LAW AND ORDER

By THE EDITOR

IN all discussions regarding the minimal functions of government, the security of life and property is accepted as fundamental, no less than defence against foreign aggression or the protection of public and private rights. Security of life and property means the maintenance of law and order, and includes the prevention and detection of crime. This duty has been, since the British Crown assumed from the East India Company in 1858 the government of India in name as well as in fact, pre-eminently incumbent on the Central Government as established by law in India, namely, the Governor-General and his colleagues, acting through the heads of all the Local Governments in British India. The transfer of certain branches of government to indigenous responsibility under the Reform Scheme of 1919 (see p. 66) did not diminish the responsibility of the Government of India to the British Parliament for the remaining branches, which include this important function of maintaining internal security for life and property; and this responsibility exists at the present moment.

A radical change in the position was proposed in the report of the Indian Statutory Commission in 1930. They debated very earnestly whether law and order should also be placed under Indian Ministers responsible to elected provincial legislatures; and finally recommended this course, notwithstanding the inherent risks. The main argument was that, otherwise, the unhealthy atmosphere would remain in which elected legislators and Ministers would treat police administration and expenditure thereon as a subject for which others than themselves should bear

unpopularity; hence the Commission recommended that the atmosphere should be changed by fixing responsibility on the shoulders of the critics.

Law and order, the Commission went on to say, is the first interest of every Indian citizen; and 'the time has come when it ought to be no longer possible to represent, or to misrepresent, the agents of authority who are so faithfull, supplying this first need of civilized existence as the minions of an alien bureaucracy'.

The principle of local provincial autonomy which was to include the transfer of the portfolio of Law and Order in the Governors' Provinces to Ministers responsible to the provincial legislatures was subsequently in December 1930 'noted' at the Indian Round Table Conference in London, though there were differences of opinion as to the future of the All-India Police Service, and as to the future of the statutory powers dealing with the internal administration of the police. There the matter rests, pending further meetings of the Conference.

In British India the police forces are highly centralized organizations, aggregating 198,000 of all ranks, directly under their respective governments. Each of the provinces has its own force, and all the forces (with certain negligible exceptions) are paid by these provincial governments. This centralized system has its counterpart in various countries and in the Indian States. For instance, large centralized Government-paid forces are to be found in the Italian Carabinieri and the Spanish Civic Guard on the continent of Europe; in the States of Australia; in South Africa (where there is only one force for all the provinces within the Union); in Canada (where there is one federal force for the whole Dominion, in addition to certain provincial and municipal forces); and in the Irish Free State. The four provincial maritime capitals (Madras,

Bombay, Calcutta, and Rangoon) have separate police organizations; but these too are paid from provincial funds. Indeed there are in India practically no police forces which are paid from municipal rates. The only force in Great Britain which is comparable in size and centralization with the Indian provincial forces is that of the Metropolitan Police for Greater London: there a force of 20,000 men serves a population of 7½ million, over an area of nearly 700 square miles, and it is directly under the Home Office, though half its cost is met from local rates. In India, however, in the Bombay Presidency a force of approximately the same establishment, 19,000–20,000 men, serves 21 million people, while the police of the United Provinces (i.e. North Central India) number nearly 34,000 and deal with a population of 48 million people over the large area of 106,000 square miles, equal to the whole of Italy.

What a contrast all this is to the municipal control which is the essence of the English system (with the exception of the Metropolitan Police) and the unrestricted local autonomy in the American system! In Great Britain there are no fewer than 240 independent forces: municipal control is tempered by central supervision, and State financial assistance to the extent of one-half of the expenditure is given subject to State inspection. In the United States there is no central subsidy, and the number of municipal forces, including those directly under Mayors and those under Commission-managers, is very large: in one State alone there are between 400 and 500. There are, however, now State Forces in eleven States; and the cost is met from State funds. In India, as has been shown, the forces are all paid by the provincial governments, and are under continuous government control.

The critics of expenditure on the police are inclined to

forget that a peaceful condition of society is a prerequisite for all professional callings, for all trade, crafts, and agriculture, and that it is not in India alone that police administration has become more complex and more expensive. It cannot be too frequently emphasized that India is a sub-continent, and not a country; and that it includes people of every conceivable type of civilization, varying from those classes, on the one hand, who for centuries have been accustomed to prey upon their neighbours, to those, on the other hand, who demand and expect all the amenities which the modern world can provide. Apart from crime properly so called, there is the potential lawlessness on the Afghan Frontier; the serious menace to order in the feuds between Hindus and Muhammadans; the waywardness of many primitive tribes; the hooligan element in the large cities; and the grave incitements to anarchy caused by what was euphemistically styled the 'civil disobedience' movement. There is one policeman to about 400 of the population in the turbulent Frontier Province on the North-West, where, it is stated, murder has been reduced to a fine art, while in the thickly populated, but generally law-abiding, area of Bihar, the proportion is as 1 to 2,400. In peaceful rural England the proportion is 1 to 940, and in the London Metropolitan area it is 1 to 378.

The organization as it exists at present, though it had its birth in Sind after 1843, has been mainly nurtured by an Act of the Central Legislature of India passed in 1861, designed to establish a purely civil constabulary capable of all police duties. Its frame was further developed as a result of a Police Commission which made a special investigation during Lord Curzon's viceroyalty. Indeed, his Government indicated a definite line of policy which has been steadily followed for a quarter of century, the

ideal being to fill the forces with loyal, competent, contented, and self-respecting men, especially by recruiting for the Indian officer rank men of good family and university education.

The local unit of control is the district—corresponding to a county in England and in America: there are about 270 districts in India with an average area of over 4,000 square miles. The title of a district police officer is Superintendent or District Superintendent of Police, which connotes a status equivalent to Chief Constable in England or Chief of Police in America. There are widening concentric rings of authority under Deputy-Inspectors-General and Inspectors-General for the provincial units. Below the District Superintendent the hierarchy consists of Assistant Superintendents, Deputy Superintendents (the invention of the 1903 Commission), Inspectors, Sub-Inspectors, Head Constables (equal to Sergeants), and Constables.

The personnel of 198,000 men (in 1930) in British India is almost entirely Indian. The British element consists of less than 600 of the higher officers, and of about 800 police sergeants, who are mainly found in the large provincial capital cities. The higher officers of all the Police Forces in British India form a body called the Indian Police Service. Up to 1905 this All-India Service was recruited entirely from England; the members join as Assistant Superintendents. This service numbered only 732 for the whole of India in 1924 and 692 in 1929, 128 being Indian and 564 British. It is destined under a system of recruitment now in operation—as a result of a Services Commission which reported in 1924—to have an increasingly Indian personnel; 251 Indians and 434 British, in all 685, by the end of 1939, and a half-and-half distribution between British and Indian by 1949.

The grades from Deputy Superintendent downwards

form Provincial Services. Those of the officer rank are recruited direct from the Indian middle classes; and by general consent their standards of education and integrity have greatly risen in the twentieth century. The Sub-Inspector is the head officer of each police station or station house, the jurisdiction of which forms the area into which all districts and cities have been divided (comparable with the English 'station' or the American 'precinct'). The Sub-Inspector corresponds to the English Inspector, or to the American Lieutenant, and has normally a staff of 12, including one who corresponds to the English 'station sergeant' or the American 'desk sergeant'. His trust covers about 100 square miles in the rural areas; so effective patrol with this staff is difficult. He is the real centre round which all revolve: the lesser luminaries, the constables, are his satellites, while the higher officers make their inspection tours with the periodicity of planets, and occasionally with the eccentricity of comets. Since 1906 the recruitment of a superior type of man together with special training has greatly improved the morale. Ample opportunities of promotion are, however, offered to constables and head constables possessing the required competency: indeed the controlling staff is eager to give merit a chance. One of the finest detectives of modern times joined the Bombay Force in the ranks, rose to be one of the heads of the police in Bombay City, and was twice decorated.

The constables are recruited practically exclusively from the agricultural classes: it should not be forgotten, however, that over 70 per cent. of the population in India are directly concerned with agriculture. In all provinces the ideal is to recruit natives of the province as far as possible, for obvious reasons relating to language and knowledge of customs. In Bengal and Burma there has been some

recruitment of men whose homes are in Upper India; but the recruitment of strangers to the province necessarily creates difficulties of its own. The root of the problem, as in so many other branches of the administration in India, is financial. The two main requirements are pay and housing; and the chief difficulties in the recruitment of men of the right stamp have arisen from the fact that in the subordinate ranks the pay was not sufficient. In 1930 the monthly remuneration of constables ranged from 15–20 rupees in the Bihar Province to 20–24 rupees in the Bombay Presidency, while that of station-house officers varied from 50–130 rupees in Bengal to 80–160 rupees in the Punjab (10 rupees = 15*s.* or 3·65 dollars). The pay in Burma and in the Presidency capitals is on a higher scale.

The press reports of clashes in India between police and mobs in which firearms are used, tend to give to the Western reader an incorrect impression that the Indian Police is wholly an armed force. It is true that every recruit goes through a course of musketry and drill; but when the recruits pass into ordinary police work they are not armed. In every province (except the Punjab and the North-West Frontier Province) there is a distinction between the armed police and the civil police. At the headquarters of each district there is a reserve which is an armed force, and it is this body which furnishes men for escort and guard duty. This reserve, too, is used in emergencies when disturbances are apprehended and firearms may have to be employed. The ordinary civil police go about their ordinary duties as unarmed as the rural constabulary in England.

Apart from the District Reserves, there are bodies of men called Military Police or Frontier Constabulary, who in effect relieve the Regular Army of certain duties. These forces number 24,000 men and are distributed mainly

over the North-West and North-East Frontiers of India and at certain key positions: the largest unit, consisting of 10,000, is in Burma, where the circumstances are exceptional, owing to the nature of the country and its history. The motto of the Burma Military Police is *Civis sed Miles*. Of course, as pointed out in Chapter V, the Army in India, British and Indian, is available as a last resource for the suppression of internal disorder; but in most Indian districts there are no cantonments or military forces; and everywhere the first strain of the burden in maintaining peace in case of disorder falls upon the ordinary police forces.

Every province has within the last thirty years made great strides in organizing training colleges for the cadet officers and schools for the constables. The object and result of the curricula have been to stimulate intelligence, to cultivate morale, and to produce better qualified servants of the public. They have done excellent work; and in some cases the principle of a specialized vocational training was accepted in India at an earlier date than in the West. The standard of literacy in the rank and file is being raised, and is distinctly high in South India and in Burma, as might be expected in view of the general literacy of these areas.

The total cost of the 198,000 police forces in British India (including Burma) in 1929 was nearly the equivalent of £8 million sterling, or 38,900,000 dollars. The incidence per head of the population (according to the 1931 Census figures) is 7*d.* or 14 cents. These figures may be compared with the cost of the 30,000 police in the counties and boroughs of England and Wales in the same year, namely, £13·8 millions or 67,100,000 dollars, and the £7·9 millions or 38,400,000 dollars for the 20,000 members of the London Metropolitan Police.

The village watchman in India is not deemed a policeman, either colloquially or officially. He is in some cases the survival of Mogul or even pre-Mogul times: in other cases he is the creation of the British Government with names varying from province to province. He is paid in different ways—by land grants, by money payments, or by both; and the control varies from pure State control to control by village councils. The chief duty of the village officer is to report crime; but he also is expected to give general assistance to the regular police, to keep a watch over bad characters, and to supply local information regarding many subjects about which Government may desire to be informed. The fact that some village watchmen are themselves members of castes who furnish recruits for the criminal classes is sometimes a source of amused criticism; but the system does not work badly on the whole, and a well-organized system of rewards exists in the provinces to encourage good work in assisting the regular police. Prosecution of village watchmen for complicity in crime is not unknown; but against that, there are many instances of remarkable integrity, striking detective powers, and wonderful courage on the part of these humble rural watchmen. The Bengal Presidency, for instance, with an area a little less than England and Scotland combined and a population of 50 millions (1931), has no fewer than 78,000 of such village officials, the number of the regular police in the same province being 24,000. It needs no argument to prove that there should be complete co-operation between these village officials and the permanent police forces of the State: indeed, this is both the ideal and the despair of all police and civil administrators in India. Reams have been written on the subject for well nigh a century. All administrative officers have a warm corner in their hearts for the village watchmen,

though they have sometimes cause to deplore the imperfections of this picturesque survival of the past.

It is now appropriate to survey as a whole the crime which the police forces in India have to handle and curb. While there is much that is familiar in Western countries, a certain class of co-operative crime, a type of hereditary crime, and a special kind of agrarian crime which has no counterpart in England may be examined.

By the term 'co-operative' is meant the crime in which bodies of men work jointly; and although the terms 'gang' and 'gangster' are familiar in the West, yet the peculiarly Indian type of co-operative crime styled 'dacoity' has features which are unfamiliar. This is an Indian vernacular word which has become naturalized in English. It is robbery with violence by bodies of five or more members, as defined in Lord Macaulay's Indian Penal Code, which, framed in the thirties of last century, has survived with surprisingly little change till the present. The commission of the offence is facilitated by the timidity of the average villager; but not infrequently the biter is bit, by the unexpected pluck and resistance of the villagers. A gang of, say, 15 or 20 men appear suddenly in a village; they loot the premises of a rich village merchant; they attack the villagers who assemble, and torture people to make them disclose where valuables are kept; and often use torches (nowadays electric) for their own guidance and the intimidation of the inhabitants. Bands of dacoits are the real bugbear to the police in every province. Mill, the historian, mentioned dacoits more than one hundred years ago; the British authorities, even now, just succeed in coping with this form of crime. Sometimes these men become outlaws; and in Upper India there are from time to time regular battles between armed dacoits and the police. The disease is a morbid growth, and is not primarily due to bad

economic conditions, though it is more active when crops fail and prices are high. The members of the gangs are really professional criminals; they take to crime not on account of poverty, but because they desire to enjoy a higher standard of living than they can earn in an honest way. The problem is how to wean them from their anti-social habits.

Next, there are some castes whose main occupation has always been criminal, or who, originally following honest occupations, have later adopted criminal habits. One interesting instance is a body of men who in former days were camp followers of the Mogul armies and are now professional coiners. As in the West, there are recognized members of the so-called criminal classes. But the real hereditary criminals of India are the criminal tribes—those unfortunate children of nature to whom crime is instinctive. While they add to the cares of administration, they certainly furnish a romance about crime, which drab criminality frequently lacks. Take, for example, the Sansis of the Punjab; reputed to have a full dose of original sin, with all the arts of the gipsy vagabond, from snake charming to jugglery; but every man, woman, and child, a thief. There are about four millions in these hereditary criminal tribes. The reclamation of hardened, hereditary, and wandering criminals is, indeed, a difficult problem. By special legislation measures have been taken to register and place in industrial or agricultural settlements certain scheduled tribes. A small beginning was made seventy years ago; in the twentieth century the aid of the Salvation Army has been invoked, and with some tribes a hopeful degree of success has been obtained. Control and reformation must go hand in hand. It is a long, tedious, and uphill task; success seems more probable on the agricultural side, and among the children.

A third general class of crime is agrarian crime; that is to say, the riots which take place over the possession of lands, crops, fisheries, and the like. Conflicts about land between rival claimants are troublesome enough, even when the solid ground can furnish some silent testimony; but they are ten times more troublesome in certain riverain areas, especially in Bengal, where the ever-shifting silt of the big rivers is constantly making and unmaking cultivable land. It is of course natural that in an agricultural country in which the pressure of the population lies heavy on the land (e.g. over 900 per square mile in North Bihar) the fight for land should be acute; and this form of crime lessens in other parts where the pressure is less. Agriculture, however, in India spells cattle; cattle must graze; the fields are usually unfenced; hence the cattle trespass on crops, and this is another fruitful source of agrarian rioting.

Without straying over the whole field of Indian criminality, it is possible to glean some individual forms of crime which are worthy of note. Cattle-theft is one such. The professional cattle-thief in India is a real pest. Blackmail is the concomitant of this form of theft—a blackmail which is sometimes intimidation, sometimes unconscious humour. If so much money is paid down, the owner will learn where his cattle are to be found. The offence has even created the professional intermediary. The branding of cattle has been adopted in some areas as a check, and is becoming more popular. Cattle-poisoning also is too common; the incentive is the market for the hides.

As in Western countries, murder in India has its principal motives in domestic strife, enmity, and greed; but disputes about land, witchcraft, and superstition are also causal factors. In Madras in 1929 a father killed his boy of 4 years, because the astrologer had given an unfavourable horo-

scope; and in the same year in Upper India a child was sacrificed and his body thrown down a well in order to lay a ghost. The professional poisoner of to-day is the lineal successor of the Indian 'thug', the robber assassin who used to strangle his victim, known to the Western world through the classic work of Colonel Meadows Taylor, *The Confessions of a Thug*, which was first published in 1839.

Again, the hero-worship lavished on persons accused of callous murders because these offences had their origin in religious fanaticism or political terrorism cannot but affect the minds of the ill-balanced to emulation. Mr. Gandhi wrote in *Young India* in April, 1931, that political murder is 'bound to recoil, as it has done in other countries, on our own heads'. The fact that in 1928 there were in all India 6,451 homicides reported and 1,896 convictions indicates that the incidence of murders to population is greater than in England, but less than in Italy.

The house-breakers in India have little opportunity or capacity for using the explosive or other elaborate methods; but the very simplicity of their methods and the opportunities for operating with comparative impunity create special difficulties in detection. As regards crimes of deceit, there are some types of contemptibly mean frauds against illiterate country-folk. Maliciously false cases, too, are a marked feature in the criminal returns. As in other parts of the world, the Indian police have to meet great skill and education amongst wrongdoers; and particularly is this the case in the matter of bogus bank and company promoters, in the forgery of notes and coins, in embezzlements and swindles in commercial houses and the like.

In measures adopted by the police against criminals, prevention comes first. There is one Criminal Procedure Code for the whole of India, and therein are provisions for

preventive action; for preventing riots and for ensuring good behaviour. At the discretion of the Magistracy evidence may be taken against suspects, who may then be called upon by the Courts to show cause why they should not be bound down in specific recognizances to be of good behaviour: the most common ground is that the suspect is an habitual thief. The local trial of such cases near the suspect's own house will usually disclose whether the prosecution is the result of personal animus, village vendetta, vague suspicion against an ex-convict, or real thoroughly-justified ill reputation. It is, however, the judgement, not only of the British administrator but of many competent foreign observers, that one of the immense difficulties of police administration in certain localities is the undeveloped sense of civic responsibility. The prevention of crime raises of course a much larger question than mere police technique; in recent years the creation of children's courts, the working of Borstal institutions, the settlement of criminal tribes, and many other measures have done something to attack at the source crime which depends upon environment.

As regards the second main division of the policeman's work—namely, investigation—a great advance has been made through the reforms initiated after the Commission of 1903. The improved training of the recruits is directed to increase their interest in their work and to stimulate their intelligence and initiative. A better type of cadet for the sub-inspector grade, a vivification of all the Criminal Investigation Departments in the provinces, and a more rigorous selection for the upper grade, called Inspectors, are producing better and cumulative results. The system, which is usually in vogue in Europe, of vertical control from the top in the case of the Criminal Investigation Department is generally in practice. For

pertinacity, integrity, and acumen the best of these staffs can stand comparison with any detective organization in the world. On the other hand, it should be remembered that the station house officer (of the sub-inspector grade) is normally responsible both for patrol and for investigation. About three-quarters of a million accused are brought to trial annually, and convictions obtained in the case of half a million.

Under this subject of investigation it may be of interest to Western readers to know that in regard to the presentation of confessions before the Courts, the law in India is more favourable to the accused than the law in England. In England an accused person is warned by the police officer charging him that any statement made by him may be used in evidence; but in India there is the very substantial protection to an arrested person that any self-incriminating statement made to any police officer—however high his rank—is not admitted in evidence in Court. If an accused does confess to a police officer, the confession can have evidential value only if it is made before a Magistrate, who will record it.

The system of identification by means of finger-prints deserves some mention; for India was one of the earliest countries to put it to practical use, first, through Sir William Herschel to prevent personation, and later through Mr. (afterwards Sir Edward) Henry, who used it for the detection of criminals. The Henry system of classification—amplified by its inventor both in India where he was an Inspector-General, and at Scotland Yard, where he became Commissioner of Police—has since received almost world-wide acceptance. It was an Indian officer who first devised a system of one-finger classification.

The police forces in India during recent years have given

proof that, through their organization, their discipline, and their leadership, their morale has been able to bear the almost intolerable strain of religious disputes between the leading communities and of incitements to disorder. Both during and since the Great War India has had sore trials: unrest, disorder, anarchical outbreaks, inter-religious conflicts, economic strain. The police have had to face an aggressive campaign to break their morale; taunts in the streets, and social boycott as regards marriage and other human activities in their homes, have not been wanting.

There are indeed few forces in the world which have to contend with so many varieties of crime and criminal, with so many differences in environment and with so great a demand on the experience, resource, and courage of the staff. Mr. Raymond Fosdick in his *American Police Systems* (1920) enumerated certain root factors which explained much that is amiss in the American body politic of to-day, forming obstacles to effective police administration. Among these, he wrote, were the heterogeneity of the population; the law's delays and the technicalities of procedure, which are beyond the control of the police; and the unhealthy state of public opinion in its attitude to crime and the criminals. All these might be affirmed of the India of to-day, though of course with local qualifications. One additional factor which Mr. Fosdick mentioned does not apply in India, namely, a faulty judicial personnel; for the general integrity and competency of the Indian magistracy and judiciary can hardly be assailed, and indeed they form one of the tributes to British rule.

The conclusion of the whole matter is this. The problem of the police in India is not static: as in other parts of the world, new methods, sinister uses of new discoveries, and increased communications enhance the normal crime

of the country, which has been shown to be varied and difficult enough. The political developments in recent years have made the problem still more difficult: these have been accompanied by outbursts of revolutionary crime which depends upon physical force through the gun and the bomb; by a campaign of incitement to disorder; and by inter-religious hostility which all observers assert has been growing in bitterness and intransigence. It is a pathetic tragedy that large numbers of a normally law-abiding peasantry have been taught to hold the law in contempt. Above all this is the unpredictable reaction to the contemplated transfer under a new constitution of the responsibility of law and order to provincial Ministers responsible to elected Legislatures. Yet whatever new constitution the future may have in store for India, the need for police forces of high efficiency and lofty morale will be no less than it is to-day.

Towards the end of 1931 the problems discussed in this chapter became acute. The Viceroy, Lord Willingdon, found it necessary to arm the Bengal Government with exceptional powers to deal with the growing menace of terrorism and assassinations. During Mr. Gandhi's absence from India at the Round Table Conference, a no-rent campaign had been stimulated in the United Provinces, and there too it was necessary to issue strong ordinances for the maintenance of public order and individual right. On the north-west Frontier the Red-Shirt Campaign assumed menacing proportions, and had to be proscribed as an unlawful organization. The decision of the Congress Working Committee at the close of 1931 to embark upon a general disobedience movement was met by a determination on the part of Lord Willingdon's Government to uphold law and order; action was taken against Mr. Gandhi and other leaders of the Congress Party.

Chapter VIII

EDUCATION[1]

By SIR PHILIP HARTOG, K.B.E., C.I.E., LL.D.

[Sir Philip Hartog, after serving for fourteen years as Academic Registrar of the University of London, went to India in 1917 as a member of the important Commission appointed under the Chairmanship of Sir Michael Sadler to inquire into the working of the Calcutta University. He was appointed, 1920, first Vice-Chancellor of the newly created University of Dacca and held that post for five years. He then served for three years as a member of the Indian Public Service Commission, and also acted as Chairman of the Auxiliary Committee on Education appointed in connexion with the inquiries of the Indian Statutory Commission under Sir John Simon.]

THE present educational position of India is the result of a complex and unique history, in which there are three main cultural factors, the Hindu, the Muslim, and the European. Only at the end of the eighteenth and the beginning of the nineteenth century did European influence become appreciable. What was the position of Hindu and Muslim education at this time?

The Hindu system itself offers the peculiarity that the small Brahmin, or priestly, caste jealously guarded for itself that knowledge of philosophy, literature, rhetoric, grammar, and, above all, religion, which is the result of two thousand and more years of civilization; the Vaidyas, or doctors, had some kind of higher learning; the trading classes had no doubt an efficient training in commercial arithmetic; the vast majority of the population remained untaught.

The Muslim system, introduced by successive waves of

[1] See the *Review of the Growth of Education in British India* (Interim Report of the Indian Statutory Commission): Cmd. 3407; 1929.

invasion, culminating in that Mogul invasion which led to the splendid empire of Akbar in the time of our Elizabeth, introduced Arabic and Persian classical culture; it led to the use of Persian itself as a refined modern language comparable to French in the Europe of the eighteenth century. It created the new vernacular, Urdu. The Muslim differs essentially from the Hindu system by its democratic character. It is the duty of every boy to recite from the Koran in Arabic, even though he may not understand it.

The two systems alike attached, and still attach, far less importance to the literary education of women than of men. The disparity between the literacy of men and of women in every part of India is least in the provinces with many Indian Christians and in Burma, where, under a system mainly Buddhist, the monks, unlike the Brahmins, regard it as a duty to teach widely, and where the male literacy is higher than anywhere else in the Indian Empire.

At the end of the seventeenth century, largely owing to the long period of internecine wars, the Hindu teaching and Muslim teaching of all grades were at a low ebb; and the first educational efforts of the administrators of the East India Company were directed to stimulating and endowing the higher learning. (See Chap. IX, p. 139.)

Perhaps the feature most significant of the general educational lethargy of India in the eighteenth century (when only a fraction of India was under British control) is the fact that three centuries after printing had been invented in Europe, India left it to European administrators, missionaries, and scholars to introduce the printing-press, alike for the classical languages (Sanskrit and Arabic) and for the vernaculars. As examples of British influence on the spread and development of the vernaculars

we may quote that of the missionary, William Carey (1761–1834), on Bengali literature, and of the official, Charles Philip Brown (1798–1884), on Telugu literature.[1] Until printing was introduced into India teaching could only be oral or given with the help of slates (still largely used) or manuscripts.

In the Charter for 1813 of the East India Company, a clause was introduced authorizing the Company to make a grant for educational purposes.[2] Pursuing the policy of Hastings, the money was mainly devoted to the teaching of the Indian classical languages, Arabic and Sanskrit, and to translations of Western books into those languages.

Western education in India began in the eighteenth century with the Christian missionaries, of various countries and churches. But it was only in the early nineteenth century that the number of their pupils became significant. At about the same period, Western education was also introduced by another independent movement, the semi-rationalist movement of an Indian of genius, himself a Sanskrit scholar, Raja Ram Mohan Roy, and David Hare, an English watchmaker of Calcutta. They founded a college in Calcutta for 'English education', and through their pupils schools for the teaching of English soon sprang up all over Bengal. The demand for 'English education' in Bengal preceded by nearly twenty years any official attempt to supply it.

But the general problem of 'arresting the rapid decay of

[1] J. B. Gilchrist (1759–1841), head of the Government College at Fort William, first printed textbooks in Urdu and Hindi; but lithography, introduced after printing, is still much more generally employed for the Persian Urdu script than printing.

[2] The phraseology used is 'the revival and improvement of literature, and the encouragement of the learned natives of India, and for the introduction and promotion of a knowledge of the sciences among the inhabitants of the British territories in India'.

literature and the arts',[1] of strengthening also the vernaculars and the vernacular schools, and of giving higher education through the medium of English began to be considered by the governments of Munro in Madras (1822–6), of Elphinstone in Bombay (1823–8), of Lord William Bentinck in Bengal (1835–8). It gave rise in Bengal to the famous struggle between the 'Orientalists', the partisans of the traditional policy of teaching through the medium of the classical languages, and the 'Anglicists', who wished to teach through the medium of English. It was admitted on all sides that the instruction of the mass of the people through the medium of their own language, i.e. the vernacular, was the ultimate object to be kept in view; and the Bengal Committee of Public Instruction wrote: 'We conceive the foundation of a vernacular literature to be the ultimate object to which all our efforts must be directed.'

The struggle between Orientalists and Anglicists was terminated in favour of the Anglicists by the famous minute of Macaulay of 1835 and the decisive minutes of Lord William Bentinck and Lord Auckland endorsing Macaulay's policy. The schools for Oriental learning were maintained, but the translations into Sanskrit and Arabic were discontinued. The system of 'English education' was adopted and encouraged by Government, and developed alongside the vernacular schools.

The motives of various officers of the East India Company in introducing Western education differed; the desire for obtaining efficient officers undoubtedly weighed with many. But men at the head like Munro, Trevelyan, and Macaulay foresaw clearly that the introduction of Western education would probably lead to a demand for Western

[1] See reference to Sir Thomas Munro, in F. W. Thomas, *History of British Education in India* (1891), p. 3.

representative institutions and welcomed that probability.[1]

An added stimulus was given to vernacular education by the conferment of the freedom of the Press in 1835 and the substitution of the vernacular for Persian in the lower courts in Bengal in 1837. But an unforeseen and unfortunate effect of the latter measure was the discouragement of education among the Muhammadans, a discouragement from which they have not yet completely recovered.

The general theory adopted by the East India Company is known as the 'filtration theory'. The Company regarded any direct attack on mass illiteracy as an impossibility. They thought that the only means of educating the masses was to educate the literary classes, who were comparatively few in number, and to let education filter down through them. This was to ignore the vast obstacles to such 'filtration', arising from Indian caste and class distinctions. Until comparatively recent times, there has been no organized movement of voluntary and religious effort on the part of the Indian higher classes for the education of the masses corresponding to the efforts which created the voluntary school system in England.

In 1853, for the first time, the British Parliament investigated seriously and sympathetically the development of Indian education. The whole of the modern system as it exists to-day in British India dates from the great dispatch of 1854 of Sir Charles Wood to the East India Company, a dispatch founded on evidence given to the Lords and Commons. The dispatch imposed on the Government of India the duty of creating a properly articulated system from the primary school to the university, under the direction of provincial Directors of Education. It led to the foundation of the three first universities at Madras,

[1] See Mayhew, *Education of India* (1926), pp. 20–1.

Bombay, and Calcutta; it prescribed increased attention to vernacular education, both primary and secondary, and the institution of a system of grants-in-aid; it expressed sympathy for the cause of female education, advocated institutions for the training of teachers and for technical instruction, and insisted on a policy of perfect religious neutrality. It looked forward to a time when the management of higher institutions might be handed over to local bodies, under the control of, and aided by, the State. There are few documents in the history of education more statesmanlike or more democratic in character. It is impossible within the limits of this chapter to deal in detail with the Hunter Commission of 1882–4, Lord Curzon's Universities Act of 1904, the Government of India Resolution of 1913, the Calcutta University Commission's Report of 1919, or the transference of the control of education under the Reforms of 1919 to Ministers responsible to local legislatures. Almost every step has been on the lines laid down in the Dispatch of 1854, and directed towards the transference of the control of education into Indian hands. The transference may now be regarded as almost complete.

So much for the general lines of policy; the stages of education will now be considered.

The following scheme shows the general grading of the non-technical and non-professional educational institutions adopted with variations in the different provinces.

Age 6–10. Primary stage, taught entirely in the vernacular (selected according to local needs).

Age 10–14. Middle stage; called Anglo-vernacular, where English is taught, but not yet used as the medium of instruction.

Age 14–16. 'Higher English' stage, in which English is mainly used as the medium of instruction. Quite recently, there has been a movement to

substitute the vernacular for English as a medium of instruction.

Age 16–20 or more. University stage in which English is mainly used as the medium of instruction; divided into (*a*) two years' intermediate stage, (*b*) two years' degree stage, and (*c*) two years' 'post-graduate' stage, leading up to the M.A. and M.Sc. degrees. In some universities, e.g. Allahabad, Dacca, and Lucknow, students are only admitted *after* the intermediate stage. At a few universities there is a three years' post-intermediate stage for an honours degree.

There are professional university courses in medicine, law, engineering, agriculture, and education (for secondary teachers), and a number of technical institutions of various grades and kinds, including training-schools for elementary teachers.

In British India educational institutions are either 'recognized' by Government, a necessary preliminary for a grant-in-aid, or unrecognized. The number of recognized institutions in 1929 was about 224,000; of unrecognized, 35,000. The number of unrecognized institutions is diminishing.

The object of the majority of the primary schools (though there are some admirable exceptions) is limited to the three *r*'s, and the main object is to secure literacy. At the moment of writing the literacy figures of the census of 1931 are not available. From the census of 1921 we learn that the highest male literacy (51 per 100 males over 5 years of age) is in Burma, a part of British India; next come Travancore and Cochin States in which there is a large Indian Christian population, and Baroda where compulsory primary education has existed for many years. The literacy among males is lower in All India (13·9)

than in British India (14·4); and it reaches a low point in two Indian States, Hyderabad (mainly Hindu, with a Muslim ruler), 5·7 per 100, and in Kashmir (mainly Muhammadan, with a Hindu ruler), 4·6 per 100. Female literacy was 2·1 per 100 females over 5 years of age in All India in 1921; and 2 per 100 in British India.

On the other hand, the Indian ministers and legislatures constituted under the Reforms of 1919, have shown a keen desire for the extension of primary education. Expenditure on primary education in British India rose from 29⅓ million rupees in 1917 to 69½ million rupees in 1927, while the number of primary pupils increased from 6⅖ millions to 9¼ millions in that period.

But unfortunately the vast majority of children do not spend in the primary school the four years which, under present conditions, are necessary for the attainment of literacy. Out of every hundred primary pupils in 1922 in Class I only thirty-four were in Class II in 1923, twenty-two in Class III in 1924, and eighteen in Class IV by 1925; and of 5,400,000 in Class I in 1927 less than 1,900,000 remained for Class II in the following year.[1]

A great Indian political leader, G. K. Gokhale, first proposed universal compulsory primary education in 1911. There is to-day a general feeling in favour of free compulsory education for boys, and all the provinces except Burma (which needs it least) have by legislation indicated their approval of the principle. But the number of areas actually brought under such compulsion is small. Compulsion without really efficient schools merely increases waste. It is by increasing the efficiency of the schools and their rural bias that the Punjab has made the policy of compulsion a practicable one in rural areas. How far literacy is being

[1] See *Education in India*, 1928–9 (Calcutta, 1931), p. 28.

influenced by compulsion cannot be ascertained until the new census figures are issued.

It was the policy of the Montagu-Chelmsford Report and of earlier reports to educate the local bodies by handing over to them certain responsibilities. But where the control of primary schools has been transferred to district boards, without keeping strong central control, such as exists and has been found necessary in England, the results have been unfortunate. The local legislatures have completely lost control over the expenditure which they vote; the policy has been as undemocratic as it has been inefficient from the educational standpoint. Primary education in India without efficient central inspection often tends to become illusory.

At the secondary stage there has been a great tendency to neglect the middle vernacular school, so necessary for the production of primary teachers. The lure to ambitious schoolboys is the university matriculation examination, as the portal to Government service, which has hitherto had an attraction which those unacquainted with India can hardly realize. The reason is simple. The greatest industry in India is agriculture, but the average holding is so small that until co-operation effects a revolution such as it has effected in Denmark, agriculture can afford no employment on any large scale to the educated; commerce and industry employ relatively few; and the only profession which compares in attraction with Government service is the great lottery of the law, to which matriculation is again a necessary avenue.

The whole of the high school system, with exceptions great in interest but small in number, is dominated by the matriculation system of the university authorities or matriculation boards. But there has been progress in recent years. The boy-scout system in some provinces, school

societies and clubs and games, better physical training (in many cases on American models) have given new life to many schools, and are helping to make them schools of character instead of only schools of book-learning. The training colleges, and with them many of the teachers, have become more efficient. But the old Indian tradition of making learning and learning by heart synonymous does not die easily.

The typical Indian institution for university education is what is called an 'arts college', providing a four years' course in arts and science leading up to pass, and sometimes honours, B.A. and B.Sc. degrees. Every small town aspires to have an arts college of its own, affiliated to a university by which the degree examinations are conducted; and, though other ideals have been placed before the Indian public, the number of arts colleges increases. In 1922 there were 152 arts colleges, in 1927, 232, and in 1929, 242. The first two years of the teaching is of the standard of school-teaching, and the report of the Calcutta University Commission in 1919 recommended that it should be treated as such. The report has had a profound influence on the aims of Indian university education all over India, though by an irony of fate it has left the constitution of the University of Calcutta unreformed. One of the chief weaknesses of the affiliating system is that it tends to keep the standard down to that of the weakest affiliated college. In some universities, e.g. Calcutta and the Punjab, that tendency has been to some extent counteracted by limiting teaching for the M.A. and M.Sc. degrees entirely or mainly to the university centre, where library and laboratory facilities are more adequate than anything that can be provided in the vast majority of provincial colleges. One of the most important results of the Commission was the creation of new universities at Dacca

and Lucknow and the reconstitution of one old university at Allahabad on a unitary and residential basis, where no 'intermediate' teaching is given, and teaching is definitely associated with research. There are now in all eighteen universities in India, of which two (Mysore and the Osmania University, Hyderabad) [1] are in Indian States. The Muslim University at Aligarh and the Benares Hindu University are unitary and residential, and intended mainly for the communities of which they bear the names. The Rangoon University is 'semi-unitary'. In 1929 the total number of university teachers (including those in the colleges) was reported to be over 6,000 and of students over 90,000.

In some ways there has been a marked advance in the universities since 1919. The standard of examinations varies a good deal in the different universities, but there has been a definite attempt to raise it in some. Again, the output of original work, though still small when the number of teachers and students is taken into consideration, is out of all comparison greater than it was thirteen years ago; and the award of the Nobel prize in physics to Sir C. V. Raman of the University of Calcutta is an event in the history of Indian universities. It is not only in physical sciences that there has been an advance. The great impetus to Indian studies given by Sir Ramkrishna Bhandarkar, the first great Indian disciple of modern methods in such studies, has borne fruit; and Indian scholars are taking rank again with the scholars of the world.

Again, the 'pastoral functions' of university institutions are being more fully realized, and more value is being attached to games, clubs, and societies, which help to

[1] In the Osmania University, Urdu is the medium of instruction, English being a compulsory second language.

make a university a school for character as well as for studies. Social service leagues are beginning to be created. But much remains to be done. Owing to their low entrance standards, the universities are overcrowded with men who are not profiting either intellectually or materially by their university training, and an undue burden is placed on the better university teachers. Even among the students who succeed in graduating there is much unemployment, but that is due to social and economic reasons partly indicated above.

Owing to conservatism, the *purda* system, and early marriage, the education of girls, in spite of recent advances, is far behind that of boys. The direct expenditure on 'female education' increased from 9⅓ million rupees in 1917 to 22 million rupees in 1927, but in the latter year it was still only 14½ per cent. of the amount spent on 'male education'; and there is a growing disparity between the number of educated boys and of educated girls. At the primary stage there are four times as many boys as girls; at the middle stage eighteen times as many; at the 'high' stage thirty-four times as many; in the arts colleges there are thirty-three times as many (1927). The vast majority of 'girls at school' are only in the first class of the primary stage.

There has been no unwillingness on the part of the university authorities to admit women to degrees, but the total number receiving 'university' and 'intermediate' education in 1929 was only 1,800 (if mixed institutions be included). One of the root-causes of the backwardness in Indian education to-day is the illiterate mother. The Education Committee of the Simon Commission reported that, in the interests of the advance of Indian education as a whole, priority should be given to girls' education in any scheme of expansion. The home is in many ways a greater factor in education than the school. In the opinion

of the Simon Commission itself, 'the women's movement in India holds the key of progress.' The increasingly prominent part taken recently by educated Indian ladies in public and social affairs gives ground for hope that the cause of girls' education will receive that support in the future of which it is in such urgent need.

Unlike the Hindus, the Muhammadans fought shy of Western education from a fear that it would mean proselytization, and they are still educationally backward. At the bottom of the educational ladder they are found in numbers more than proportionate to the population, but at every higher stage they drop out. In 1927 the percentage of the Muhammadan pupils to the total was 28 at the primary stage, but only 13 at the university stage. Nevertheless there is progress. During 1922–7 the numbers at the university stage increased by 56 per cent.

Girls' education is far more backward among Muhammadans than among the Hindus. At the primary stage the girls constitute 29 per cent. of the total; in the middle stage only 5 per cent.; in the high stage 2 per cent. In the women's arts colleges in 1927 there were only thirty Muhammadan women.

The educational progress of the Muslims has been retarded, especially in primary education, by the conflict of the old Government ideal of religious neutrality with the intense Muslim desire for religious teaching in the schools, in strong contrast with the absence of such desire on the part of the vast majority of Hindus. The modern movement in Muhammadan education is due largely to the efforts of one man, Sir Syed Ahmad, in the last quarter of the nineteenth century, comparable to the efforts of the Raja Ram Mohan Roy in the first quarter. The foundation of the Anglo-Oriental College, Aligarh (now the Muslim University) was due to the former.

The number of 'depressed' classes who are regarded as 'untouchable' has been variously estimated at from 30 to 60 millions. The Simon Commission took the figure for British India as about 43·6 millions.[1] There are none in Burma. Children are in many places excluded from the schools on the ground of caste alone. Since 1922 the rate of increase in the number of the depressed classes under instruction has been greater than the general increase of all classes—a fact largely due to the political and social awakening of these classes themselves. But the number of boys of these classes who receive education above the primary stage is extremely small, except in Bengal; and the number of girls who receive such education is negligible. Provision for the depressed classes is mainly made in special schools; but an effort is being made, with partial success, to force local bodies to admit them to the ordinary schools, a solution of the difficulty which many regard as the best.

The Christian missions from various countries were among the first pioneers in education in all grades; and, especially in collegiate work, their educational activities have been almost entirely divorced from proselytizing activities. They have aimed at making their institutions schools for the training of character; and they have rendered great, and generally recognized, services to the country. Of late years, as other agencies have come into the general field, they have given increased attention to the education of the depressed classes, aborigines, and hill tribes.

The proportion of the total public funds which is applied to education varied in the provinces from 9 to 17 per cent. in 1927.[2] Government expenditure, however, forms only

[1] *Report of the Indian Statutory Commission* (1930), vol. i, p. 40.

[2] It is to be remembered that since the Reforms of 1919 'education' is

a part, in some provinces less than half, of the total expenditure on education, the rest being provided by local board funds, fees, and 'other sources'. In Anglo-vernacular secondary schools the average annual fee paid by a boy is 21½ rupees (32*s*. 3*d*. or 7·84 dollars) and by a girl 13⅘ rupees (20*s*. 8*d*. or 5·03 dollars).[1] In arts colleges for men the average fee is about £6 or 29·20 dollars.

A large number of Indian students complete their education in Great Britain and other countries. In 1929–30 there were over 2,000 Indian students taking university and professional courses of various kinds in Great Britain, and about 300 taking such courses in other Western countries (including about 200 in the United States). In Great Britain, as elsewhere, the cost of each student exceeds many times the fees in university institutions, and the number of Indian students admitted each year is generally limited. A considerable number of them are doing research work.[2] There is a special department under the High Commissioner for India which looks after the interests of Indian students in Great Britain, and administers a sum of about £30,000 yearly entrusted to it by their parents and guardians.

The extent to which English is used as the medium of instruction in secondary and higher education is indicated on p. 125. The Calcutta University Commission recommended that its use should be abandoned in the high schools except for mathematics and English; and there is

a 'transferred' subject in the hands of Indian Ministers in the nine Governors' provinces.

[1] The figures are taken from *Progress of Education in India*, 1922–7, vol. II, pp. 160 and 220, and from *Education in India*, 1928–9 (Calcutta, 1931), p. 53.

[2] In the academic year 1929–30, five Indian students took the D.Sc. degree, one the D.Litt., and nearly fifty the Ph.D. degree in Great Britain (Report of the Education Department of the Office of the High Commissioner for India for 1929–30, p. 20).

a general feeling in favour of this policy; but in provinces with a number of vernaculars (e.g. Bihar, Bombay, the Central Provinces, Madras) difficulty is felt in conducting the school leaving or matriculation examination in so many languages. It has been urged on 'national' grounds that English should be replaced as an official language and as a *lingua franca* for India by a vernacular such as Hindi, English being taught as a 'second' or 'third' language in schools. The question is too complex a subject to be discussed here.

It is no doubt true that the present plan and system of Indian education with its qualities and defects are largely due to British educational administrators. Those administrators have loyally tried to carry out the policy laid down in the Despatch of 1854 with the financial means at their disposal, and they have grappled with immense difficulties. But the part of the teachers, of whom the vast majority are Indian, must necessarily be in many ways greater than that of the administrators; and in the universities, for a large number of years the majority, not only of the teachers, but of the senates or other governing bodies, have been Indian. It was decided after the Report of the Lee Commission (1924) that the Indian Educational Service, which furnished most of the European members to higher educational administration and teaching, should be gradually extinguished (see p. 99). Any Europeans appointed to higher educational posts in India will be appointed to individual posts, as local governments may decide.

It will be seen that India has been, to a far larger extent than is generally realized, responsible for her own education during many years. Perhaps the greatest danger ahead in education is a certain chauvinism, and an undue absorption in the glories of the past, as indicated by that advanced politician, the late Lala Lajpat Rai. The present

writer has faith in those younger Indians who are sharing with Western comrades the task of advancing knowledge in various fields, not for any one country, but for the world as a whole—the men who look forward and not backward. But the task of bringing the 350 millions of India up to the general level of Western education will not be a light one. It is indeed colossal.

Chapter IX

ART AND CULTURE

By SIR E. DENISON ROSS, C.I.E., PH.D.

[Sir Denison Ross has been Director of the School of Oriental Studies in London since its establishment in 1917. He has travelled extensively in Central Asia, China, and Persia; and was for ten years Principal of the Calcutta Madrasah, the most important Muhammadan educational institution in Eastern India. He is Professor of Persian in the University of London and the author of numerous works dealing with Oriental culture.]

IT is perhaps difficult for us at the present time to realize how little was known of India and her great past even by the Indians themselves at the end of the eighteenth century. India had already become a reality to Europeans in the sixteenth century, but their interest in her was for long limited to the commodities she needed and produced.

The Portuguese, who were the first Europeans to establish themselves in any part of India, had on their first arrival no knowledge whatever of the country. Indeed, so limited was their knowledge of the world that they seem to have imagined that people who were not Christians must be Muhammadans, and they actually regarded the ceremony they witnessed in the first Hindu temple which they entered as a debased form of Christianity. During the sixteenth and seventeenth centuries neither they nor the French, the Dutch, nor the English seem to have displayed any curiosity in regard to the early history and culture of India. Many travellers, it is true, visited the court of the Great Mogul and wrote entertaining and instructive accounts of what they had seen, but it was not until the end of the eighteenth century that anything in the way of careful study and research was undertaken.

The only language necessary for foreigners to acquire

in their dealings with the Delhi Court was Persian, and the practical study of this language which was duly encouraged from the outset by the authorities, did not in itself throw any light on the culture or history of India. Warren Hastings, himself a good Persian scholar, was the first European governor on Indian soil to realize that in order to rule over the Indians with justice and sympathy it was essential to acquire a knowledge and understanding of their laws and customs, and it was during his Governor-Generalship that the study of the ancient Sanskrit language and literature first received the serious attention of those Englishmen who were destined to make their careers in that country. It was actually under his successor, Lord Cornwallis, that the existing Hindu and Muhammadan laws were first codified.

The names of the first pioneers in the field of Sanskritic and Hindu studies make quite a formidable list, such was the deep interest aroused; and it must be remembered that all of them were busy men who only had their leisure time to devote to their researches, being otherwise employed in onerous posts, in a climate not usually conducive to the expenditure of superfluous energy. Men like Sir William Jones, the founder of the Asiatic Society of Bengal, James Prinsep, Colebrooke, Bryan Hodgson, and Wilson, all held important official positions, and it is a source of wonder that they should have found time for so much study of such difficult subjects. The work begun by these Englishmen was eagerly taken up by scholars in France and Germany, and it is hard for us to picture the effect which must have been produced on thinking men in Europe by the discovery of this ancient culture whose existence they had never suspected. The foundation of the Asiatic Society of Bengal by Sir William Jones marked the baptism, if not the birth, of Orientalism, and it rendered from the outset

invaluable services to scholars all over the world, both by its publications and by the impetus it gave to these studies. The *Bibliotheca Indica* instituted by this society, which still continues its activities, is a treasure-house of Hindu and Muhammadan literature.

There is an interesting minute by Lord Wellesley, dated 18 August 1800, which runs as follows: 'In the disorder which preceded the fall of the Mogul Empire all public institutions calculated to promote education and good morals were neglected and at length entirely discontinued.'

It was therefore the policy of the Government to combine with the pursuit of the traditional learning of India the discipline of well-ordered colleges, and already in 1781 the Government had founded a Muhammadan college or *madrasah* in Calcutta, and in 1792 a Sanskrit college in Benares.

By the middle of the nineteenth century enormous strides had been made and totally new branches of research discovered and developed. Among the outstanding names of this period are those of Monier-Williams, Edward Thomas, John Muir, and Max Müller. This last scholar perhaps did more to make known the legacy of India to the world than any man before or since, and India in her turn owes him a deep debt of gratitude. The earliest pioneers had taken up the study of Sanskrit more or less as a hobby, and even Sir William Jones's labours were prompted more by aesthetic enthusiasm than by mere delight in scholarship. As soon as opportunities came into existence for the study of Sanskrit and kindred subjects in Europe, it became possible for the Government of India to recruit orientalists for the educational service, which thus came to include such eminent names as those of Sprenger, Cowell, Thibaut, Hoernle, and Stein, to mention only a few.

It is quite evident that all these scholars benefited to an enormous extent by the learning of the Hindu pandits (learned men) whom they found ready to hand in Bengal and elsewhere, but in the early days it would appear either that the pandit was not interested in the results obtained by his pupils or else that these pupils did not trouble to explain to the pandits exactly what was their object. Examples of Indian scholars themselves making contributions to Sanskritic studies on modern lines were rare in early days, but later we do find among them such outstanding figures as Rajendralal Mitra, Sarat Chandra Das, Hara Prasad Shastri, and Bhandarkar, while in our own day India can point to many fine scholars who have produced valuable work in which is found the happy combination of traditional learning and modern methods of research. If a catalogue is made by an Indian to-day, it will not be a bare hand-list of titles and authors without further comment, but will contain all the information which a modern scholar requires; and if a text is published, the edition will be a critical one.

Up to this point I have confined my remarks to the ancient language and literature of the Hindus. Although much that has been said applies equally to Islamic literature, it is in the nature of things impossible to deal with these two subjects simultaneously, for at no point do they come in contact or influence one another. Both literatures are primarily based on religion, and while the former is of purely native and local growth, the latter is an exotic derived from a distant land and belonging to a distinct civilization. When, however, we come to consider the fine arts the same difficulty does not arise, and Hindu and Muslim are to be found working side by side, each exercising an influence on the other.

Apart from fundamental differences in cultures, it must

be remembered that the early Hindus had no taste for writing histories, their minds being engrossed with things less transitory than passing events. On the other hand, the various peoples who have adopted Islam since it was first preached in the seventh century have all shown an inclination to write history, and this tendency is found to a very marked degree among the Indian Muslims. Thus it is that from the beginning of the eleventh century onwards we have very full records, mostly in Persian, of the Muslim dynasties which ruled over Northern India.

Although the majority of early Muslim historians were not of Indian birth, the existence of so many histories presupposes a demand in India for this branch of literature. In the reign of the great Sultan Mahmud of Ghazni (998–1030), the famous Persian Al Biruni (d. 1048), wrote what was the first work dealing with the manners and customs of India, a rich mine of information on every aspect of Indian culture. But his work was a solitary apparition, and it was not till the middle of the eighteenth century that ancient India was again made the subject of scholarly research, and this time also it was not the Indians themselves but the foreigner who embarked on the work. It was the great French scholar Reinaud who first drew attention to Al Biruni's *India* and the famous German orientalist Sachau who translated it (1879). So accurate was the information which Al Biruni collected and put down in the great Arabic work which bears his name that modern scholars, with all the resources of archaeological and other researches of a hundred specialists at their disposal, can only confirm and but seldom refute his statements.

The materials for the history of the Muslim dynasties in India was all ready to hand in numberless chronicles, containing the records usually made by the order of, or in

honour of, some great monarch. These histories, moreover, were written in a language not only simple but to all intents and purposes a living language in daily use among the educated Muslims of India, for Persian was the recognized medium for all their historians.

The case of Buddhist and Hindu history was far otherwise, and while on the one hand researches in this field entailed the study of a very difficult language, nothing was ready to hand to form the basis either of chronology or ethnography. When the knowledge of Sanskrit suddenly opened out a new world to the scholars of Europe, little help could be derived from the Hindus themselves beyond the profound knowledge their pandits possessed of their great language and of its literature. (Whether the work of Al Biruni was at any period made the subject of study by the Hindus we can never know, but we do know that nothing exists in Hindu literature on lines of similar research.) It remained therefore the task of Europe to introduce the ancient culture of India to the Hindus, and ultimately to arouse their interest in their historical past and make scholars of them on the Western model. It must not be thought that learning and a love of study at any period died out in India, either among the Hindus or the Muslims. At all times they had many seats of learning which produced scholars of one particular type. The first aim of the Hindu pandit was the perfect mastery of Sanskrit grammar, just as the subtleties of Arabic grammar were the root of all knowledge for the Ulema (Muslim doctors of sacred law). But if their learning was deep it was lacking in breadth, and it never occurred to them to go outside the limits of a certain fixed curriculum. They were content for ever to study and annotate the classics and to write super-commentaries on commentaries, but there seems to have been no desire on the part of the learned

to co-ordinate their studies or to deduce from them the history of their own past.

The country also had schools in plenty which were presided over by these learned men, but little was taught to the Indian boy, whether Hindu or Muslim, beyond the rudiments of grammar and the first principles of his religion. Everything he learnt was by rote only; and of the world around him, whether of science or of natural history or of geography, he had no chance of learning anything. A very small percentage of these students only would in their turn adopt the teaching career, and from among such as these were recruited the learned scholars who kept alive the great traditions of the past. If the learning resembled rather a deep well than an ocean, these pandits and maulavis (learned Muhammadans) possessed and handed on a knowledge not only of Sanskrit and Arabic but also of certain classical books to which no European could perhaps ever attain—a knowledge which has been of inestimable value to Western scholars in their studies of the languages and literatures of Hinduism and Islam.

It is devoutly to be hoped that the encouragement of the Western methods of scholarship and research in India may not result in the elimination of the scholar of the old type. That this danger need not be apprehended is clearly shown by the publications of a number of learned Hindus and Muslims, who in the last fifty years have done work of a quality to satisfy Western ideals by super-adding to their own traditional learning an acquaintance with European languages which enables them to appreciate and benefit by the researches of Western scholars.

The monuments of India had to wait far longer than her literature before obtaining recognition and the attention they so much needed and so richly deserved. It is difficult

to explain why this should have been the case. Not until 1862 was anything in the nature of an archaeological survey instituted in India, when Alexander Cunningham was entrusted with the survey of the monuments of Northern India. It was Cunningham who laid the foundations of archaeological research in India, but the sole aim was research and there was no question of the conservation of buildings. In 1874 departments were also instituted to deal with the monuments of Bombay and Madras. Writing in 1880 Sir Richard Temple tells us that 'the duty of conservation is being recognized by the Government of India and by the several local Governments and it is to be expected that some results will be secured'. In 1889, however, the Director-Generalship of Archaeology was abolished.

In 1902 Lord Curzon, horrified at the desecration of some monuments and the total neglect of all, brought about a complete transformation by instituting a central Directorship with control over all provincial departments. He had the wisdom and, may one add, the good luck to find outside India a trained classical archaeologist in John Marshall, who at once set to work on the conservation of monuments and the exploration of important sites. Such has been the progress made under Sir John Marshall's able Directorship that in the present year (1931) over three thousand monuments are being cared for or explored. Among Sir John Marshall's greatest achievements are his excavations in Taxila[1] and in the Buddhist sites of Bihar and Orissa. In 1923–4 he laid bare the hitherto unknown sites of Harappa and Mohenjo-daro which have revealed

[1] Taxila, which lies about 25 miles to the north-west of Rawalpindi, is one of the most important towns of ancient India. It was imperfectly excavated in the days of Cunningham, but since 1915 has been wonderfully dealt with by Sir J. Marshall.

buildings and yielded seals which carry back the history of India probably to 3000 or even 4000 B.C. The full reports on these excavations are shortly to appear and are naturally awaited with keen anticipation by the learned world. Among the treasures found in these sites are upwards of 150 seals bearing great similarity to the seals of Sumeria. Up to the present these seals have not yielded up their secret, but it has been suggested that they may eventually reveal to us not only the earliest traces of Indian mythology but also the origin of the Brahmi script.

It is to Lord Curzon in the first place that we owe the rescue of so many beautiful examples of Indian architecture from desecration and demolition. His labours in this field alone would entitle this great Viceroy to the gratitude of all lovers of art and of the people of India in particular. Nor was his interest in these matters merely academic. He himself visited nearly all the sites of interest and found time, in a post where the duties are enough to exhaust the capacities of most men, to enter into the minutest details of archaeological research. If he was fortunate in his choice of Director-General, Sir John Marshall was equally fortunate in serving such an enthusiastic and untiring Viceroy.

The admission of Indians to posts in the Archaeological Department has had far-reaching results, and Hindus and Muslims have shown themselves both eager and fit to carry on the great work of unveiling the hidden past of their own motherland. In fact the newly appointed Director-General of the Archaeological Survey is an Indian.

In connexion with the Archaeological Survey museums or parts of museums have been devoted to the preservation of movable objects. The first of these was the Indian Section of the Calcutta Museum. More recently the policy has been adopted of forming local museums near

important sites such as those of Taxila, Sarnath, and Nalanda so that these antiquities may be studied amid their natural surroundings rather than in some distant place.

Apart from special memoirs and central and local annual reports the Department issues from time to time the *Epigraphia Indica*, now in its nineteenth volume, and the *Epigraphia Indo-Moslemica*, devoted respectively to Hindu and Muhammadan epigraphy.

No account of the preservation work in India would be complete without a reference to the Indian States. Some of these, including Hyderabad and Mysore, Kashmir and Gwalior, have their own Archaeological Departments.

Though the serious study of the monuments and ruined sites of India dates back over fifty years, the importance of Indian painting has only in quite recent times been recognized, following close in the wake of the keen interest aroused by the miniature art of Persia. In the rock-hewn temples of Ajanta, Bagh, and Ellora there have been preserved by the greatest good fortune a large number of mural paintings dating from the sixth and eighth centuries. Though much mutilated and weather-worn, they are in sufficiently good condition to give us a definite notion of the high standard attained by Indian artists at this period. Sir John Marshall declares that they 'will bear comparison with the best that Europe could produce down to the time of Michael Angelo'. Much labour has been spent in preserving these notable works of art, which are no doubt the prototypes of all later Buddhist paintings. Financial aid towards the preservation of these antiquities and the publication of descriptive memoirs has been furnished by both Hyderabad and Gwalior. Between the eighth and sixteenth centuries painting is mainly represented by pictures in Hindu, Buddhist, and Jain manuscripts. The

Moguls of Delhi imported many Persian artists into India, and gradually there grew up a school of Indian miniature painters who created what is known as the Mogul School. Most of these artists were Hindus, and they very soon developed a characteristic style similar in many ways to that of the Persians but unmistakably distinct and different in presentment. Finally, there arose various schools of Indian painting which are known by such names as Rajput, Kangra, Himalayan, and so forth. It is Dr. Coomaraswamy who has done most to further the study of this branch of Indian art.

During the present century revivals of Indian painting have taken place, the Tagore family of Bengal having led the way. In spite of a marked European influence and a resultant sentimentality in these modern artists they show signs of a return to the classic Hindu style, such as did not manifest itself in the Rajput paintings, which could never quite rid itself of the Persian influence. The Government has done much to encourage these revivals in the various schools of art founded in Lahore, Calcutta, and Bombay. Apart from the action of the Government in India, there has been an increasing interest taken in Indian culture by the public in England, as is evidenced by the activities of learned societies, the promotion of exhibitions of Indian art and antiquities, and the publication of literature dealing with Indian art and its influence on the other countries of Asia.

Section 33 of the Act of 1813 relating to the privileges of the East India Company declared that it was the duty of this country to promote the interest and happiness of the native inhabitants of the British dominions in India, and Section 43 empowered the Government to expend not less than a lakh (100,000) of rupees on the revival and encouragement of learning.

It was during the administration of Lord William Bentinck (1828–36) that the great question arose regarding the adoption of English as the medium for secondary education. A battle was fought between the Anglicists and the Orientalists, the former being represented by the Governor-General himself, Macaulay, and Trevelyan, the latter by Wilson, Bryan Hodgson, and Prinsep. The Anglicists held that English must be the instrument for transmitting both Eastern and Western culture; the other party held that education to be effectual for the masses must be imported through the medium of the current vernacular. The victory of the Anglicists on the one hand, and the great prestige attaching to Sanskrit and Persian on the other, for many years retarded the growth and expansion of vernacular literature. For while English education meant the study of a quite foreign culture, the classical languages of India were incapable of modernization. The adoption of English thus created a gap in the cultural development of the intelligentsia of India, and we have the curious spectacle of thousands of Indians with practically no knowledge of their own culture becoming occidentalists: just as if Europeans were to become orientalists without first receiving a thorough education in the languages and literatures of the West.

The Hindus seem as a whole to have had no hesitation in accepting an English education; the Muslims on the other hand felt very strongly that the study of 'infidel' books might tend to shake the belief of the Faithful; and thus it came about that the Muslim community, independently of its inferiority in numbers, fell far behind the Hindus in higher education. It was at one time difficult to persuade young Muslims to take up the study of Arabic and Persian with a view to research on Western lines of scholarship. For while the strict Muslims regarded the

learning of Western languages as unorthodox, the advanced section of the community looked upon Arabic literature and learning as retrogressive and antiquated, and fit only for the old-fashioned moulavi, who imagines that the zenith of learning has been reached in the past, and that he has only to learn what others have learnt and taught before him. The truth is that there were until recent times very few Muslims in India who had any idea of the extent and wealth of Arabic and Persian literature or of the amount of material awaiting investigation. The prejudices of both factions have now almost vanished; and every encouragement is being given both by the State and by Muslim parents to young men who wish to devote themselves to Islamic studies, which in fact have occupied the devoted attention of some of the foremost savants of Europe.

One of the most important services which the Government of India has rendered to Indian Studies is represented by the great *Linguistic Survey* which was begun and completed by Sir George Grierson, who devoted no less than twenty-five years of untiring labour to this immense task, which comprises eighteen volumes. Here are to be found descriptions and specimens of nearly all the known languages and dialects of India, and of many of the neighbouring countries, making a grand total of over 850 languages and dialects. Truly a worthy monument to a great scholar. The value of his labours to the world of scholarship was recognized by the decoration of the Order of Merit, a distinction which no other person has ever received for services in connexion with India.

All through the long history of India, vernaculars—each with its special features—were of course being spoken in every part of the country. In Upper India these vernaculars were with few exceptions closely allied to Sanskrit.

As a result of the Muslim invasions and occupation of this country there grew up that mixed form of speech, half Indian, half Persian, which was called Urdu.

The earliest vernacular literature of India does not date back more than seven centuries, and for long it was confined to religious poetry. It was in Bengal that a vernacular prose style first came into being, and the two most notable figures in this great literary dawn were Raja Ram Mohan Roy and the novelist Bankim Chandra Chatterji. A similar movement was witnessed in the west, where Hari Narayan Apte produced the first original novels in Marathi. Bengali and Marathi poets, like Rabindranath Tagore and Tilak, have developed new types of poetry and composed verses of a totally new style both in subject and in metre. This movement did not, however, spread to Urdu, for among the Muslims poetry had always, with one solitary exception, retained its rigid classical traditions. The Arabs and the Persians, for example, still adhere to the metres employed by their earliest poets. Only in Turkey has there occurred, and that already in the nineteenth century, a revolt against the old Islamic metres and an attempt to copy the poetry of the West, especially of France, in form and in matter.

Urdu, which is the common medium of all Indo-Muslim poets, has not up to the present shown any signs of divesting itself of the classical Persian models on which it was originally based. It is to be hoped that before long Urdu poets may be inspired to turn this rich and flexible language to account and free themselves of this slavery to ancient forms. Sir Muhammad Iqbal, the foremost living Muslim poet in India has indeed broken new ground in his Persian and Urdu poetry as far as regards subject-matter, but he adheres still to the old metres.

The Asiatic Society of Bengal from the very outset

included in its activities the natural sciences, which are equally with literature, history, and philology represented in its Journal and other publications. Nowadays special surveys devoted to botany, geology, and zoology are maintained by the Government of India: as early as 1786 the Royal Botanical Gardens were started in Calcutta. The Geological Survey was instituted in 1851 and the Zoological in 1916. The Indian Museum in Calcutta, which was opened in 1875, at first contained the material handed over by the Asiatic Society of Bengal; and since then the Museum has always been under the supervision of a zoologist, who now has under him five assistants, all Indians.

Though the Indians were late in taking up scientific investigation they have already produced a number of very remarkable chemists and physicists who have gained the coveted distinction of the Fellowship of the Royal Society.

Chapter X

PEASANTS, LANDHOLDERS, AND THE STATE

By W. H. MORELAND, C.S.I., C.I.E., B.A.

[Mr. W. H. Moreland is generally acknowledged to be the greatest authority of our day on the economic aspects of land revenue in India. As a member of the Indian Civil Service he was for some twelve years Director of Land Records and Agriculture in the United Provinces. He has devoted close study to, and undertaken original research on, the economics of the Mogul period; and his books, *India at the death of Akbar*, *From Akbar to Aurangzeb*, and *Jahangir's India*, are pre-eminent in their field.]

IT is a commonplace to say that India is a land of working peasants, not capitalist farmers, and that the peasants stand to the State in a peculiar relation, the most conspicuous feature of which is the seasonal payment, whether direct or indirect, of what is known as Land Revenue. When, however, we ask what is the nature of these recurring payments, we pass abruptly from commonplace to controversy, for while one school presents the system as an admirable financial expedient, another denounces it as a grossly oppressive and inequitable form of taxation. Between these hostile schools the only common ground is the paramount importance of the subject, and some explanation of it is indispensable to a survey of the country such as is presented in this volume.

Such an explanation must begin from the distant past, for this Land Revenue is in no sense a creation of British Rule. It is one of the oldest institutions in India, prescribed in the books which embody the Sacred Law of Hinduism, recognized by successive Muslim conquerors, and preserved during the British period with such modifications as were required to meet changes in the economic conditions of the country. The explanation which follows

cannot therefore be confined to the regions directly under British administration, but extends to All India in the geographical sense, States as well as Provinces. On the other hand, it does not apply to Burma, a country with an agrarian history of its own.

In the oldest Hindu polity of which we possess knowledge, that which is depicted in the writings constituting the Sacred Law, it was the duty of the peasant to cultivate the ground and pay a share of the gross produce to the King. So long as he performed this twofold duty, he was entitled to expect the King's protection; failure to perform it involved the sin of rebellion, and, apart from spiritual consequences, could be punished in this world by eviction from the land or otherwise. This 'King's share' of the gross produce of the land is the origin of the Land Revenue system as it exists to-day. Muslim conquerors made no material alteration in an arrangement which was substantially in accordance with the Islamic institutions of the time; but some of them laid increased stress in practice on the idea that failure to pay the revenue was an act of open rebellion, so that in the seventeenth century the sale of a defaulter's wife and children, as rebels, and consequently slaves, was a recognized process for the recovery of arrears due, while failure to cultivate sufficient land was punishable with flogging. This conception of the peasant's duty persisted right up to the establishment of British rule, and even at the opening of the present century it was familiar in some sparsely populated States: its disappearance from the greater part of the country has resulted almost entirely from the growth of population during the nineteenth century, and the consequent emergence of competition for culturable land. On the economic side, this new fact is the chief differentia of British rule: so long as land was waiting for peasants, a State eager for

revenue had the strongest possible motive for extending cultivation; but when peasants were waiting for land, action in this direction became unnecessary, and an entirely new set of problems emerged, the attempt to deal with which will be described farther on.

In the Hindu and Muslim periods, the points in the system which concerned the peasant most closely were the share of produce claimed by the State, and the arrangements for its assessment and collection. As regards the amount of the share, the Hindu text-writers were not entirely unanimous, but, speaking generally, they regarded one-sixth of the gross produce as a reasonable figure; they allowed, however, that the King might take one-fourth or one-third in emergencies, of which he was necessarily the sole judge. Records of the Hindu period are too scanty to show what share was generally taken in practice: a few which have come to light indicate that it was nearer one-half than one-sixth; and it is a permissible conjecture that the maximum recognized by text-writers was in fact either the standard or the minimum prevailing in their time. For the Muslim period, precise records are more copious, and they establish the fact that, while in certain exceptional cases one-fourth was claimed, the ordinary standard ranged between one-third and one-half, with a definite tendency in favour of the higher figure. The claim to which the British administration succeeded was normally one-half, and very rarely less than one-third, of the gross produce of the soil, and this figure was increased by a large number of cesses, imposts, and exactions, individually small, but in the aggregate considerable and vexatious.

As regards administration, it would be a mistake to picture the State officials of the Muslim period as engaged regularly in the actual division of the produce as each field ripened. Some strong administrators did in fact deal with

individual peasants, either by estimating the produce and valuing the 'King's share', or by measuring the area sown and levying a fixed charge on each unit; but the general practice was to assess the annual revenue, not on the individual, but jointly on the peasants cultivating what is called in India a village, a term which, like the English 'civil parish', denotes merely a defined area, not necessarily inhabited, recognized as a local administrative unit. Assessment on the village took two forms. In one, the assessor came to terms annually with the representatives of the peasants for the payment of a lump sum equivalent, so far as it could be calculated, to the aggregate value of the 'King's share' of the produce of the village. In the other, the village was 'farmed', for a year or a term of years, to a speculator, who offered a satisfactory sum as revenue, and received authority to collect the 'King's share' from the individual peasants. Further, it must be remembered that under Muslim rule large areas were left in the hands of Hindu Chiefs, who paid, or accounted for, a sum fixed in advance by way of tribute, and had a free hand in dealing with the peasants.

When, therefore, British administrators took charge of a portion of India, they found that in all cases the peasants were prepared to pay Land Revenue, usually at the rate of half the gross produce, but they found also wide diversity in the methods of assessment. In some cases, the individual peasants expected to deal directly with the officials; in others, the 'village' expected to be assessed in a lump sum; in others again, the peasants expected that the assessment would be made on intermediate agents, whether farmers of the revenue, or Chiefs. The first British administrators were concerned mainly to bring the country into some sort of order, and they inevitably tended to accept whatever practice they found in operation, as offering the line of

least resistance; hence arose that diversity in the methods of assessment which makes it necessary to describe the existing system by regions. One general distinction may be drawn at the outset, which in the jargon of the early years was denoted by the terms 'ryotwari' and 'zamindari'; the former term means that the State deals with individual ryots, that is to say, peasants, while the latter means that the State deals with intermediaries or landholders; and it so happens that, broadly speaking, the former system prevails in South India, the latter in the North.

British concern with the Land Revenue may be dated from the year 1765, when the East India Company was appointed by the Mogul Emperor to be his Revenue Minister (*Dīwān*) for Bengal and some adjoining regions; the appointment was made on farming terms, the Company undertaking to make fixed annual payments to the Emperor, and depending for its remuneration on what it could collect in excess of these. At this period, the bulk of Bengal was in the hands of a comparatively small number of landholders, who were technically revenue-farmers, and paid as Land Revenue fixed sums supposed to represent nine-tenths of what they collected from the peasants; but both their receipts and their payments were in fact substantially greater. After various unsuccessful experiments, the Company made the best terms it could with these landholders. At first the assessment on them was made for a term of years, but subsequently it was declared to be permanent; the landholders were thus placed in the position of owners subject to the payment of a fixed annual charge or quit-rent, constituting the Land Revenue of the province, and the peasants became their tenants, not concerned directly with any payments to the State, but interested vitally in the amount which they were required to pay to the landholders as rent.

When British authority extended towards the north-west, the experience already gained in Bengal was utilized, but new difficulties were met. During the anarchy of the eighteenth century in this region, when the Mogul Emperor's authority had practically disappeared, the 'King's share' had become the bone of contention among many rival claimants—hereditary Chiefs and new usurpers, ex-officials, farmers, and mere adventurers; and various experiments and mistakes were made before the conflicting claims were at last sifted, and a body of landholders recognized as owners, subject to the payment, not of a fixed charge as in Bengal, but of whatever Land Revenue might be assessed on them from time to time. The original claim to nine-tenths of the landholder's receipts was reduced, first to two-thirds, then to one-half, and recently in some provinces to less; and the main problem of assessing the Land Revenue was to determine the income which the landholder realized from the land. This consisted mainly of the rents paid by the peasants, who had now become his tenants; and an effective statistical organization was gradually elaborated, with the aid of which the true rental-value of each estate can be ascertained with reasonable precision at each periodical assessment. These assessments, which in India are termed 'settlements', recur at intervals of twenty or thirty years.

Where then a landholder was found, assessment became a comparatively simple process, but in this region very many villages had originally no landholders, and in these cases the position was conferred on the peasants of the village as an organized body. In such villages there is no regular rental system, and the income of the peasants as landholders cannot be distinguished directly from their gross receipts as growers of produce; in order to assess them, rent-rates, varying with the soil and the locality,

are deduced from the adjoining areas where rents prevail, and these rates ordinarily form the basis on which the peasant-landholder's income is calculated, though in some regions, where peasant-landholders predominate, it is necessary to proceed on lines similar to those which are followed in the 'ryotwari' country to the south. Before describing these, it will be well to summarize the existing position in the 'zamindari' or landholders' country.

The peasant has become definitely a tenant, and now pays rent where formerly he paid the 'King's share' of his produce; but this fact, by itself, does not mean much to him, and many peasants use the same word to describe the two things. The landholder has become an owner subject to the payment of Land Revenue, whether fixed permanently, or reassessed periodically on the basis of his receipts from his tenants; and rent, not revenue, has become the vital question of the day. The original landholders were required, as an incident of their recognition, to extend cultivation and cherish their tenants. It cannot be said that this requirement was generally fulfilled; but extension of cultivation came of itself, and with disconcerting rapidity, as the result of increasing population and internal peace. Hence, by the middle of the nineteenth century competition for land had become acute; peasants were offering rents up to, or even in excess of, the Ricardian standard, rents which would not leave them more than a bare subsistence, or even that, while landholders were rapidly tending to regard such rents as their reasonable dues.

The result was a series of Tenancy Acts, adapted to the conditions of the different provinces. The legislation is too voluminous and complicated to be summarized in a few words, but the general idea is to prevent the level of rents from rising to the point which would be reached under

the régime of free competition for land, and so to leave the tenant a margin for improving his holding and raising his standard of life. The chief provisions curtail the landholder's power of eviction, and limit the enhancement of rents, usually by making the amount dependent on the order of a Court or Revenue Officer. These provisions have not been entirely effective, for the greed of some landholders and the land-hunger of many peasants combine to defeat them, but they have done very much to ease an agrarian position which would otherwise by now have become intolerable. As the law now stands, the gross produce of the land is shared by three parties, peasant, landholder, and State. The landholder's share is somewhat less than it would be if determined solely by competition: its precise evaluation is scarcely possible, but, speaking very roughly, it ranges from a maximum of one-fifth or one-sixth down to one-tenth or less of the gross produce, and half, or less, of this—say from one-twelfth to one-twenty-fifth of the gross produce—is paid by him to the State in the form of Land Revenue. The peasant's payment is thus on the whole definitely less than the proportion recognized by the Sacred Law of Hinduism as reasonable in normal times.

We must now turn to the 'ryotwari' system, the essence of which is that the State deals directly with each individual peasant, and not with intermediary landholders. In Madras, the first attempt at organization was to find, or establish, landholders as had been done in Bengal, and a substantial proportion of the province is in fact 'zamindari'; but, speaking broadly, the attempt failed, and for a century or more the bulk of the peasants have been assessed individually. At first the assessment was made on the basis of a share of the gross produce; but in the year 1864 a fundamental change was made, and it was decided

to assess on the net income, that is to say, the cost of production was to be deducted. The methods of assessment were elaborate. The gross produce was valued, with many allowances and deductions; this value was reduced by the calculated cost of production; and something less than half of the resulting figure was claimed as Land Revenue for the thirty years following the ascertainment, the actual claim being stated in the form of revenue-rates per acre, varying with the soil and other conditions. Calculations made officially early in the present century showed that the assessment was well below one-tenth of the gross produce, while more recently unofficial investigators have deduced a substantially lower proportion. In Bombay, the other great 'ryotwari' region, the claim on the peasant is also stated in the form of revenue-rates per acre, revised at intervals of thirty years, but the principles on which these rates are calculated have not, until quite recently, been formulated with the same precision as elsewhere, and their incidence has been a matter of some controversy: at the opening of the present century it was calculated officially to be between one-eighth and one-twelfth of the gross produce.

The actual position in British India may be summarized as follows. The peasant still surrenders, as he has always surrendered, a share of his gross produce to the State, either directly or through the landholder, but the share surrendered is very much smaller than it was in Muslim times, from an outside figure of one-fifth down to one-tenth or less, as against one-half or one-third. In 'zamindari' regions the peasant pays slightly more than in 'ryotwari', while the State receives distinctly less, the difference constituting the income of the landholders; but in those regions where the Land Revenue has been fixed permanently, the State receives comparatively little, and

the landholders enjoy a correspondingly larger income. The standards of the Muslim period left the peasant practically nothing for either 'better farming' or 'better living', to use the now classical phrases: the standards now in force leave ordinarily a substantial margin at the disposal of the peasant. An economic reformer may ask whether, looking at India as a whole, the landholders are 'worth their keep'. The question is of much theoretical interest, but in practice it does not arise; for, whatever their original claims may have been—and some of them were at the least dubious—they hold their present titles from the British Government in India. A more pertinent question relates to the use which the peasants have made of the margin left at their disposal, for the whole future of the country depends largely on the answer. Hitherto it must be confessed that, on the whole, the margin has been wasted, because a common tendency has been for the peasant to sublet part of his holding, set up as a small landholder, and rackrent his tenants as only a peasant can; while he has used the credit resulting from this margin to involve himself in heavy unproductive debt, incurred mainly for social extravagance. Of late, however, there have been signs that the outlook of the peasant in these matters is beginning to change, and should the demand for 'better living' develop, these unsatisfactory tendencies will become progressively of less importance.[1]

Comparisons such as have been offered above between the past and present relation of Land Revenue to gross produce are sometimes criticized on the assumption that the fertility of Indian soils has declined in the interval.

[1] According to the *Agricultural Statistics of India* (vol. i, British India) for 1928–9 (Calcutta, 1931), the 'ryotwari' area covers more than half of the total area paying land revenue, a little less than one-third is in the hands of landholders subject to a periodic revision; and rather less than one-fifth is held on a revenue which has been fixed permanently.

Discussion of that assumption must be left to agricultural experts, but it may be well to explain here that no statistical basis for it exists. We possess, indeed, a record of the produce of all important crops in Northern India, as calculated for assessment purposes about the year 1540, but unfortunately the units in which it is expressed cannot now be ascertained. Of the two probable units of weight, one gives *average* productivity just about equal to that of the present day, while the other indicates a slight decline. The latter result is the more probable, because, when fertility is approximately constant, extension of cultivation to inferior soils must reduce the average of the whole region, and there is no doubt that large areas of very poor land have been brought under the plough during the last century. With the exception of this ambiguous document, no figures of the Muslim period have survived to furnish the basis of a statistical comparison.

The account which has been given above of conditions in British India necessarily omits a large number of minor tenures, prevailing in one region or another, and a mass of administrative detail, all of which would have to be mastered by a student who should desire to speak with authority on the subject. A few words must be added as to the position in the Indian States. Speaking very generally, the tendency has been to follow the British administration, but cautiously, and at some distance. Standards of Land Revenue have been lowered, but not to the same extent; there has been some reluctance to make binding engagements for so long a period as thirty years; and there has been a definite preference for the 'ryotwari' over the 'zamindari' system. No published data exist from which to draw even such rough estimates of the incidence of the revenue as can be offered for some of the Indian provinces.

Readers who have followed thus far will recognize that

the old controversial question whether Land Revenue is tax or rent is not susceptible of a simple answer, a fact which doubtless accounts for its persistence. As with all questions of classification, the answer depends largely on the definitions adopted. Taking the words in their every-day meanings, 'rent' as a periodical payment for the use of land, 'tax' as a contribution levied by the State on the population generally or on certain classes of it, there is no doubt that the payments made by peasants to landholders are rent; they are not levied by the State, and consequently cannot be classed as tax. Payments made by peasants in 'ryotwari' regions to the State are equally rent, because the peasant has to pay them in order to have the use of land: if he does not pay, he is evicted. They are, however, also tax, being a contribution levied by the State on a class of the population. Payments made by the landholders to the State fall equally under the definition of tax; but they can also be regarded, especially where they have been fixed permanently, as quit-rents payable by certain classes of freeholders. The controversy is thus as unfruitful as the fabled dispute over the colour of a chameleon.

If a Western analogy must be found for what is essentially an Indian institution, comparison should be made, not with rent or tax, but with the royal domain which in some European countries was assigned to the King to cover the cost of the administration. In such countries the King took all the produce of some of the land: in India he took some of the produce of all the land. Regarded as a fundamental political institution, either arrangement is eminently reasonable, and the difference between the two is insignificant. In some European countries improvident Kings alienated most of the royal domain; and in England, for instance, the receipts from the Crown lands now make

a very poor showing in the annual budget. Some Indian rulers were equally improvident, but the recorded practice of the country for the four centuries before British rule establishes the fact that their alienations were resumable, and on occasion were resumed, at pleasure. The East India Company succeeded therefore to the Indian royal domain practically unimpaired; but it introduced the Western idea that alienations made by its predecessors should be respected, and this change accounts for the large areas held in many parts of India free of any payment on account of Land Revenue. It proceeded further to make fresh alienations by the establishment of landholders with enduring titles. So far as these landholders represented old-established Chiefs, their recognition merely regularized the existing position: where they represented speculators or usurpers, the fact of alienation is undoubted, and it is to be justified, if it can be justified, on the ground of the social, economic, and political benefits accruing to the country from the change. The Company's early action in fixing permanently the Land Revenue payable over large regions is condemned by the present generation of Indian economists almost as wholeheartedly as by modern British administrators; but subject to these alienations, it may reasonably be said that the ancient royal domain of India remains substantially intact, for disposal by the self-governing nation now in process of evolution. This fact is recognized clearly by the peasants; for liability to pay the 'King's share' is admitted from one end of the country to the other, though the amount of the payment in any particular case may be vigorously contested.

In conclusion, a little must be said regarding certain tendencies which have recently come into operation, and which warn us not to regard the present systems of assessment as necessarily permanent. In the first place, an

important margin of safety has disappeared as a result of the entry of India into the world-market for agricultural produce. When British rule began, exports of produce from India were small, and the want of communications cut the country up into a large number of small independent markets. In each one of these, something like half the produce of the season had to be marketed in a great hurry in order to pay the Land Revenue; it was an exceptionally strong case of the harvest-glut familiar to all students of peasant economics. A series of unusually good harvests might ruin the peasants of a particular region; and, apart from such calamities, the ordinary peasant received much less silver for his crops than would have been the case under other conditions. During the nineteenth century Indian markets were unified by railways, while the opening of the Suez Canal placed the unified Indian market in direct touch with European consumers, for it rendered possible the export of food-grains, oil-seeds, and fibres on a scale previously undreamt of. The result was that Indian prices were gradually levelled up, and this continued rise in prices gave a margin of safety in the assessments of Land Revenue.

The first British assessors inevitably started from the standards which had been accepted by previous rulers, and the knowledge that these standards were ruinously excessive came only by degrees. Many early assessments were consequently higher than was desirable in the interests of the country; but rising prices saved the situation, and an assessment which was dangerous at the moment it was made might become moderate in less than ten years, simply because the peasants were getting more money for their produce. No such relief can be expected in future. Apart from the present (1931) 'slump', which is presenting the Indian administration with problems unfamiliar since

the time of Aurangzeb, the future, as forecast by most authorities, lies between stabilization and a gradual fall of prices resulting from increasing scarcity of gold. The first alternative would be consistent with the maintenance of the present systems of assessment, though the margin of safety would disappear: with the prospect of a gradual fall in prices, assessment for anything like thirty years would be out of the question, and the whole machinery might have to be reconstructed.

In the second place, it must be remembered that existing methods of assessment were closely adapted to the conditions in which they developed, and it is matter of common knowledge that in India velocity of change is increasing. It would be rash to attempt any forecast of the changes that lie ahead, but it appears to be probable that increased flexibility will be needed in order to adapt the system of assessment to changes in trade and industry, in wages, and in the standards of living of the people.

In the third place, political changes also must be taken into account. This statement may be illustrated from the recent history of Bardoli, an insignificant tract in Western India which not long ago became an acute political topic. The assessment of this tract was revised in the ordinary course; protests against the new revenue-demand were voiced by politicians; and eventually a further official inquiry established, to the satisfaction of the Government of Bombay, the fact that the assessment was altogether excessive. In this case the agitation was justified by the result, but its real significance lies in the establishment of a new precedent. Future re-assessments are likely to become increasingly the subject of political debate, 'lobbying' and 'log-rolling', and the tendency will be for the incidence of the Land Revenue to vary inversely with the political influence of the assessees. To put the matter as

shortly as possible, existing systems of assessment, worked out under a detached autocracy at a time when social and economic conditions changed but slowly, gave on the whole satisfactory results: they may require substantial alteration, or even complete reconstruction, in the India which is now emerging.

Chapter XI

AGRICULTURE AND FAMINE RELIEF

By SIR JAMES MACKENNA, C.I.E.

[Sir James Mackenna was closely associated with problems of rural development throughout his career in the Indian Civil Service. In Burma, the province in which he first served, he was long Director of Land Records and Agriculture, and in 1916 he was appointed Agricultural Adviser to the Government of India and Director of the Central Agricultural Research Institute at Pusa. He was the Chairman of committees on cotton and on sugar, which resulted in important advances in cultivation and organization, and he was a member of the Royal Commission on Agriculture in India.]

IT is common knowledge that the predominating industry of India is agriculture. The census of 1921 showed that nearly 80 per cent. of the population are dependent for their livelihood on agriculture or the industries subsidiary to it. Except in the few large towns interests are entirely limited to the sufficiency or insufficiency of the monsoon, the state of the crops, and the health of the cattle. The population tends to concentrate in small villages[1] rather than in large towns, and attachment to the village is strong. Although the opening up of communications by road and rail and the advent of motor transport have done much to break down the isolation of the villages, the aloofness from the general current of progress and the feeling of self-sufficiency still persist in a remarkable degree. Year follows year; generation succeeds generation; but the village and the village life still go on as of old, adapting themselves but slowly, as regards their internal economy, to changed conditions.

Since the beginning of the nineteenth century much has happened to make this village economy more secure. The

[1] Only 10 per cent. of the population live in urban areas.

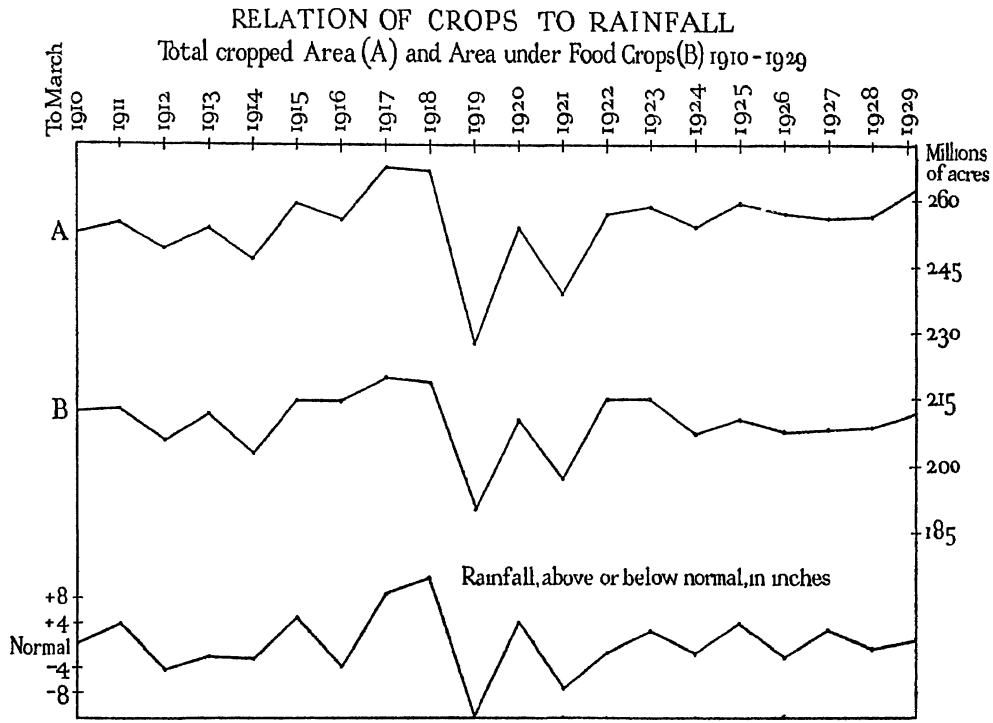
establishment of peace within the country and of security on its borders, and the evolution of a land revenue system which has given the landholder security of tenure have done much to strengthen the position of the cultivator and to assure that the fruits of his labour will be left to him. The development of irrigation and the improvement of communications have induced him—now secure against oppression or eviction—to devote more attention to the cultivation of his land. He has every stimulus to produce a surplus beyond the immediate requirements of his family, and has passed from the small self-contained peasant to a contributor to the world's supplies. Improved communications have put him in touch with the outside buyer who wants his surplus crop and pays for it in money. Since the opening of the Suez Canal and the coming of the steamship, with its cheap freights and more rapid transport, the village has gradually drifted into the vortex of the world's commerce. The cotton, jute, rice, oil seeds, and other products of the little Indian village now find their way to every corner of the globe.

As a corollary to the persistence of the village system, India is a land of small cultivators. There is very little large scale farming. The peasant who cultivates a few acres with a pair of bullocks and the assistance of his family is the rule. The influence of the laws and customs governing inheritance amongst the Hindus and Muslims favours the partition of immovable property amongst a number of heirs. As selective partition and re-partition go on, the tendency is for holdings to grow smaller and more scattered. The tenancy legislation, while assuring security of tenure to the tenant, makes it more difficult for the large landowner to retain large compact areas for himself. As a matter of fact, there has, until recently, been little desire or capacity on the part of large landowners to

work their estates themselves. This condition is changing to some extent as their sons are availing themselves of the agricultural training which the Agricultural Colleges present; but for the time being the small cultivator holds the field, and it seems likely that he will always continue to do so.

It is not surprising that any calamity befalling this peaceful and patient peasantry should touch the hearts and arouse the sympathy of those responsible for their welfare. The records of the past indicate that the shadow of famine often fell across India. When the rains failed, (see diagram) the crops withered and men and cattle died, thoughts turned to the means of obviating such disasters and the problem of securing a greater certainty of crops by the introduction of drought resisting varieties or by the extension of irrigation assumed prominence. The latter line of protection was adopted after the great Bengal and Orissa famine of 1866. The question of forming agricultural departments was also considered, but it was felt that, as a basis for these, it was necessary to have more statistical information bearing on agricultural matters. With this groundwork well and truly laid the Famine Commissioners of 1880 were able to carry the matter a stage farther. They recommended a central authority dealing with agricultural matters, but they also insisted on the absolute necessity of the simultaneous formation in each province of a department of agriculture with a large subordinate establishment under an executive officer. Their duties were defined as *agricultural inquiry*, *agricultural improvement*, and *famine relief*.

The position at the end of the last century may be broadly summarized as follows. The foundations of a scientific agricultural department had been securely laid by a careful study of all statistics bearing on agricultural


RELATION OF CROPS TO RAINFALL
Total cropped Area (A) and Area under Food Crops (B) 1910 - 1929
To March
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
Millions of acres
A
260
245
230
B
215
200
185
Rainfall, above or below normal, in inches
+8
+4
Normal
-4
-8

matters and by the evolution of a land records scheme which safeguarded security of tenure by a recognized record of rights. From 1885 onwards one detects definite strivings after practical agricultural experiment. Experimental farms were started in most provinces and a few scientific workers were recruited. The expansion in the provinces was so rapid that, in 1901, the Government of India appointed an Inspector-General of Agriculture to act as an adviser in agricultural matters both to the Imperial and to the various provincial Governments.

The report of the Famine Commission of 1901—the last of its kind—followed by that of the Irrigation Commission in 1903 gave the final urge to a forward movement in scientific agriculture. The Commission of 1901 definitely recommended that the expert staff of the agricultural department in all provinces should be strengthened and that mutual credit societies on the lines of the German co-operative credit societies should be introduced. 'The steady application to agricultural problems of expert research', they remarked, 'is the crying necessity of the hour'; 'but', they added, 'security of the harvest only postpones the pressure of the population on the soil; it is prudence and knowledge and the practice of thrift alone which will relieve it.'

The recommendations of these two Commissions were speedily translated into action by Lord Curzon's Government; and, to the far-sighted vision of that great Viceroy, much of the progress of Indian agricultural research must be attributed. The Co-operative Credit Act of 1904 was passed and the expansion of the agricultural departments, both Imperial and provincial, was taken in hand. On the 4th of June 1903 the Government of India submitted to the Secretary of State a scheme for the establishment of a central agricultural research institute, with an experi-

mental farm and agricultural college at Pusa (in the Darbhanga district of Bihar). The dispatch submitting this scheme marks the real beginning of organized agricultural research in India. To the establishment of the research station Lord Curzon devoted the greater portion of a generous donation of £30,000, given him by Mr. Henry Phipps of Chicago, to be applied at his discretion to some object of public utility, preferably connected with scientific research.

The scattered scientists of the Imperial department were brought together at Pusa, and necessary additions made to the staff. The policy of the Pusa Institute has, from the outset, been to concentrate mainly on the investigation of fundamental problems of importance to the whole of India, and to undertake special lines of inquiry referred to it by provincial departments. Its equipment is admirable; and its laboratories, museums, libraries, and lecture rooms challenge comparison with those of any similar institution in the world. The institute is controlled by a Director and has the following sections: Agricultural (including cattle breeding), Bacteriological, Botanical, Chemical, Entomological, and Mycological. There is also a physiological chemist working on animal nutrition, an agronomist, and a dipterist. Other Imperial institutes are the Institute of Animal Husbandry and Dairying at Bangalore; the Sugar Cane Breeding Station at Coimbatore (both in South India), and numerous cattle-breeding and dairy farms. An allied institution is the Imperial Institute of Veterinary Research at Muktesar (in Northern India). All are concerned with problems of general interest to the whole of India as distinguished from those of purely local importance.

Simultaneously with the establishment of the Central Institute at Pusa, steps were taken to develop the agricultural

departments in the provinces, and generous grants in aid were given for this purpose by the Government of India. The general idea was the establishment, in each province, of an agricultural college with an adequate staff of scientific workers for research and for teaching. This would be supplemented by experimental farms in each homogeneous tract and by small demonstration plots to carry the results to groups of cultivators. The minimum staff contemplated for each province was an agriculturist, a chemist, and a botanist, but provinces have developed at different rates of progress. In most cases the staff is very much in excess of the original scheme, and nearly all provinces have thoroughly equipped colleges and research institutes.

In the early stages of development the Inspector-General of Agriculture was of much assistance to provinces in the formation of their departments and had a considerable responsibility in connexion with the development of the central institute at Pusa. In 1911, however, by which time the foundations had been laid, the post was abolished and an Agricultural Adviser to the Government of India was appointed, who also took over the Directorship of the Pusa Institute. This officer carried on some of the functions of the Inspector-General, and visited and advised provinces if requested to do so. But, as provincial departments settled down to work, references from the provinces became fewer and, with the transfer of the agricultural departments to the control of Indian Ministers, as the result of the Montagu-Chelmsford reforms of 1919, the scope of his labours was more and more curtailed.

The transfer of agriculture to provincial control under popularly elected Ministers tended to divorce the provinces from any association with the central research institutes; so, in order to co-ordinate the work of these central

institutes with that of similar institutes in the provinces, some organization representative of all interests was necessary. The Royal Commission on Agriculture in India recommended in 1928 that the post of Agricultural Adviser should be abolished, that Pusa should have a whole-time director, and that co-ordination between central and provincial institutes should be effected by an Imperial Council of Agricultural Research. This Council has been constituted and its duties are: (*a*) the promotion, guidance, and co-ordination of agricultural and veterinary research throughout India; (*b*) the training of research workers; (*c*) the collection and dissemination of information; and (*d*) the publication of scientific papers.

The Chairman of the Council is the Member of the Governor-General's Executive Council in charge of the portfolio of Agriculture, and there are three whole-time Officers of the Council—an Administrative Officer, an Agricultural, and a Veterinary Officer. The Council is divided into two parts, with executive and advisory functions respectively. The advisory body, which offers the Council technical and expert advice, includes the heads of the various technical services in the provinces. Ministers and members of the provincial legislatures form the majority of the governing body which controls the administrative and financial side of the Council's business. The Council is to be financed by a fixed minimum annual grant which at present amounts to about £55,000.

Such, in brief outline, have been the various stages in the development of an organization to deal with the problems of agricultural improvement. All such improvement must be built on research—there can be no other foundation. It is to co-ordinate and regulate this research work that the Council of Agricultural Research has been established.

In the course of their brief existence provincial departments have succeeded in building up an efficient organization for the dissemination of the results of research. In general the procedure in the provinces is as follows. Research on agricultural problems is as a rule concentrated at a central research institute or experimental farm. When an improved seed has been evolved, it is tested and tried out on the central farm; and, when proved and established, it is distributed in small quantities for trial under field conditions on the district agricultural stations. Each province is divided into agricultural circles under a Deputy Director of Agriculture who is responsible for the work of his circle. He generally has a large central farm as his head-quarters where he carries out experimental work himself and tests on a field scale his own results as well as those passed on from the head-quarters station. In addition, there are in each circle specially equipped seed farms where the improved seed can be multiplied under strict control for issue to the general public. These may be either departmental farms or fields hired from selected cultivators who guarantee to keep the seed pure and to sell it back to the departments, which test its purity before re-issue. The sequence is: the small experimental research plot; the test on a field scale on the central farm; the multiplication of seed on seed farms, and its issue to the cultivator. The main task of the departmental officer is, by constant inspection, to keep this seed pure at all stages.

On most central and seed farms, stocks of improved implements and manures are kept, so that the farm becomes the recognized centre for the dissemination of all agricultural improvement. Experience seems to indicate that the best and quickest way of influencing the position of the cultivator is to demonstrate an improvement in crop or method on a small plot belonging to a cultivator,

tilled under departmental control or direction. This has the advantage of bringing the demonstration right into the heart of the village. The cultivators themselves can see what is going on, and are not overawed by the superior equipment of a Government station. They realize quickly that the improvements are within their own limits.

In a country of small holdings, and with a population which is conservative and largely illiterate, the spread of improved varieties and the adoption of new methods must, of necessity, be slow—much slower than in the West, where every trade facility and advertising device can be utilized to boom a new grade of seed or a new implement. In India propaganda work has, for the most part, fallen on the agricultural departments in the various provinces; for there are, as yet, few professional seedsmen or manufacturers of agricultural machinery. As a result of this limitation, the activities of the relatively small departments of agriculture have not so far touched more than a fractional part of the country. It is, indeed, modestly claimed that improved varieties recommended by the departments cover only some ten million acres. But the important point is that this area has more than doubled in the last five years; and there is reason to hope that the rate of progress will be more rapid in the future. With the increase of trained staff which the agricultural colleges can now turn out, an ever-expanding body of keen and competent young Indian workers is being quickly built up, and finance will be the only limiting factor.

The diversities of geological formation, of climate, and of agricultural practice vary the problems of every province and of every tract; but, as illustrations of the general lines of work, a few of the principal crops may be selected.

The most important crop of India is rice. It covers some eighty million acres, or over 30 per cent. of the

total cultivated area, and is the staple food of the great bulk of the population. In most provinces the problem is the production of heavier crops of better-grade rice for local consumption. There is much scope for improvement, for, while the average out-turn per acre in India is only from 700 to 1,000 lb., in Italy and Spain it is five times as much. In Burma the exportable surplus is large; not only does Burma export rice to India, but she contributes some 86 per cent. of the total Indian exports to other countries. In these circumstances, the policy of the agricultural department has naturally been to improve the quality of their rices with a view to meeting the requirements of the export market: an improvement in which the local consumer, of course, also shares. With this in view the department has, by selection, aimed at the elimination of the defects which are so common in Burma rice and which lower its value in the world's markets. These defects are: the presence of red grain, lack of uniformity in the size of the grain, excessive breakage in milling, and the presence of awns. After many years of careful selection the department has succeeded in isolating and fixing ten types, which have uniform white grain and yield in the mill a higher percentage of whole high quality rice than the local varieties commonly grown. Millers pay a premium of from 5 rupees (7*s.* 6*d.*) to 20 rupees (£1 10*s.*) per 100 baskets (4,600 lb.) for these improved strains, and cultivators are said to make an extra profit of 10 rupees (15*s.* or 3·65 dollars) per acre by growing them. Although these improved varieties are, so far, found on only some 3 per cent. of the total area under rice in Burma, the leaven is gradually working, and slowly but surely the standard of Burma rice is being raised.

Next in importance to rice is wheat, the main food staple of the peoples of Upper India. Here again the out-turn

is very low, being only 575 to 760 lb. per acre or barely one-third of the out-turn in the United Kingdom. When the agricultural department began work, it was known that India could produce wheat of first-class appearance and that it already possessed better grades than it put on the market. With this knowledge Mr. and Mrs. Howard began to investigate the problem at Pusa. They undertook a complete survey of Indian wheats and separated type specimens of almost every variety. From the wheats of the Punjab twenty-five types were isolated. As pure types, these yielded enormously increased out-turns, though great variations were found and there were many defects in quality. The wheats lacked 'strength'; the straw was weak—an important matter where high winds prevail; and there was also a liability to rust. Systematic selection and comparison had to be carried out, with patience and discrimination from the second to the sixth generation, before Pusa 12 could be fixed as a type free from these defects. High-yielding, rust-resistant wheats of good quality and standing powers have been evolved; and now Pusa 4 and Pusa 12 are well known by all plant breeders. They have been extensively cultivated in the wheat-growing tracts of India, and have also found their way to other countries.

The Punjab, which has some 34 per cent. of the total acreage under wheat in the whole of India, has evolved its own improved varieties; and so effective has been the organization for distribution, that over 20 per cent. of the whole acreage under wheat in the province is now sown with these improved varieties.

The crop that has been best organized as regards research, marketing, and prevention of malpractices is cotton. Here, again, the average out-turn is low, being only 80 to 100 lb. of ginned cotton per acre. As a result

of the report of the Indian Cotton Committee which toured all the cotton tracts of India in 1917–18, an Indian Central Cotton Committee, composed of representatives of all phases of the industry, has been set up in Bombay. This is financed by a small cess on all cotton ginned and baled in India. To prevent the deterioration of cotton in tracts of good repute by the introduction of inferior varieties, a Cotton Transport Act has been passed to regulate the movement of cotton from one area to another. A Cotton Ginning and Pressing Factories Act has been introduced to safeguard 'marks'. The general question of marketing is under examination in all its bearings. Financial assistance is given to provincial departments to enable them to carry out botanical and other experiments on the crop, and such problems as the pink boll-worm pest are also under investigation. Finally, the Committee has, at Bombay, a well-equipped technological laboratory which provides the cotton breeder with a clear idea of the fibre properties and the spinning values of his selections at an early stage in his work, and is also available to the public for trade tests.

In spite of the large imports of sugar into India from Java, which amount to about 800,000 tons per annum as against the local production of 100,000 to 120,000 tons of refined sugar, there is a strong all-India desire to get India back to a self-supporting position. The main problem in connexion with sugar-cane is peculiarly interesting. Peninsular India, which falls within the tropics, produces thick canes with high yields, the cultivation is intensive, and the crop is heavily manured. But the crop is relatively unimportant. The area under it is small, and is limited by the amount of water available and the quantity of rice grown. It is in fact a luxury crop and, as such, is grown on a very small scale on any one holding. The

irony of the position is that from time immemorial the bulk of the crop has been grown in Northern India, which is out of the tropics and on land which is really better adapted to wheat. The canes are thin and as a rule short. The average out-turn is about one ton of sugar per acre as against four times that amount in Java. As there is little indication of a desire to expand the industry in Southern India, it is to the large sugar-cane tracts of the north that attention must be devoted if India is to supply its own sugar. Imported canes, all of which come from the tropics, will not stand the poor cultivation and the cold winter climate of Northern India.

Accordingly, Dr. Barber, the sugar-cane expert, set himself the problem of evolving hardy hybrids to supplant the present inferior local canes. The work is carried out at Coimbatore in the Madras Presidency as canes flower there every year and produce pollen. The canes are known as *Co*, and *Co* 213 is the variety most widely grown. The work is of necessity slow, but good progress is being made in the introduction of these improved canes, and continuous research goes on at the sugar-cane station. The provincial departments co-operate willingly in extending the cultivation of these canes.

The very low out-turns quoted above, which unfortunately apply to most of the other crops of India, naturally raise the question whether the soils of India are to-day undergoing a progressive decline in fertility. The Royal Commission on Agriculture, which examined the matter very carefully, postulated the problem as follows:

'whether long cultivated agricultural land is to-day suffering a growing diminution in its capacity to yield crops, as a consequence of the removal, year by year in the form of produce, of more of those substances essential to the growth and development of crops than is replaced by nature and by the practice of the cultivator.'

On the evidence submitted to them by local Governments and expert witnesses they arrived at the following conclusion:—

'Such experimental data as are at our disposal support the view that, when land is cropped year by year, and when the crop is removed and no manure is added, a stabilized condition is reached; natural gains balance the plant food materials removed by crops and other losses and no appreciable changes are to be expected in the out-turn of crops except those due to changing seasons, provided that the same system of cultivation is adhered to. While the paucity of records of crop out-turns throughout India over any long period of time makes the matter impossible of exact proof, we are of opinion that the strong presumption is that an overwhelming proportion of the agricultural lands of India long ago reached the condition to which experimental data point. A balance has been established, and no further deterioration is likely to take place under existing conditions of cultivation.'

Unfortunately, the custom prevalent in many parts of India, of using cow-dung as a fuel rather than as a manure, deprives the soil of its most readily available fertilizer. During recent years, however, it has been found that vast amounts of very valuable organic matter, in no way inferior to farmyard manure, can be prepared from waste products by the simple process of *composting*. At any time in the year the whole countryside is littered with refuse of all kinds, and, if this is utilized in accordance with the methods devised by the agricultural departments, thousands of tons of organic matter can be made available at a comparatively trifling cost.[1] By reinforcing these organic matters with artificial fertilizers much larger areas could be manured. Some of the new brands of artificial fertilizers now on the market are particularly suitable for Indian soils, and they can be purchased at a price which

[1] See A. Howard and Y. D. Wad, *The Waste Products of Agriculture, Their Utilization as Humus* (1931).

makes their use profitable. Continuous research and propaganda are carried on by all provincial departments, while, at Pusa and elsewhere, such basic problems as the lime requirements of soils, the conservation of soil moisture, the fixation of nitrogen, and the utilization of the sources of natural indigenous phosphates are under investigation.

Agricultural education is a difficult problem in India. Ever since Lord Macaulay penned his famous Minute, literary education has held the field, and there have always been grave misgivings as to whether this was the type of education best suited to the conditions of the country. It has been argued that it has had the disadvantages of tending to alienate the sympathies of the cultivating classes from practical farming. If education in secondary schools had been less literary and more technical, it is possible that a greater interest in the land would have resulted, and the rural population would have returned to their farms as better cultivators instead of struggling in competition for badly paid clerkships.

Whatever the merits of the case may be, the departments of agriculture have seriously tackled the problem and have devoted much attention to the question of giving a practical bent to education in rural areas. They have advocated nature study in primary schools to pave the way for the teaching of the principles and practice of agriculture in middle schools. In a predominatingly agricultural country like India, with an ever-increasing population, the time will come when the intensification of production will be inevitable, and the youth of the country must be trained along lines which will enable them to take their place as scientific workers and investigators.

At present, apart from the Imperial Research Institute at Pusa which, on the educational side, concerns itself mainly with post-graduate teaching and research, there

are six agricultural colleges. These are located at Poona in the Bombay Presidency, Coimbatore in the Madras Presidency, Cawnpore in the United Provinces, Lyallpur in the Punjab, Nagpur in the Central Provinces, and Mandalay in Burma. They provide a training for students who desire to enter Government service in the agricultural or allied departments, or who propose to farm their own land or act as farm managers for other landowners. The number of applicants for admission to these colleges steadily increases, and the standard of proficiency shows a marked improvement.

The scope and character of the agricultural education which should be given in secondary schools have been subjects of acute controversy. The Royal Commission on Agriculture went very fully into the question and eventually endorsed the Punjab system. There 'the aim is to enrich the middle school course in rural areas by the inclusion of agricultural training and thus to bring it more in keeping with the environment of pupils; and the object is to use agriculture as a means of mental discipline and training and as an important accessory to the general subjects taught in these schools'. A small farm is attached to the school and the instruction given in the class-room is illustrated and supplemented by practical work on the land under a specially trained teacher. As has been the case elsewhere, the lack of trained teachers has been an obstacle to more rapid development.

In addition to these standardized courses a large number of short courses on special subjects are given at the colleges, or on the farms. These are attended by teachers, mechanics, and in some cases by adult practical farmers.

With the development of scientific agriculture in India there has been progressing, side by side, an economic force which has the closest bearing on agricultural progress—

the co-operative movement. This movement has not, it is true, advanced with the rapidity which its early sponsors fondly desired, and there have been many reverses. But young trees need much pruning; and there is no reason to doubt that the co-operative movement will eventually develop into a strong and healthy growth. Little progress has so far been made with forms of co-operative activity other than credit, but a man must be got out of debt before he can take much interest in other aspects of co-operation. In a country of small holders the value of sound co-operation cannot be overestimated. Improvements in agricultural practice, pure seed, new implements, and manures can be more readily adopted by a group of cultivators bound together by common interest than by the isolated individual. Through co-operative sales societies, facilities for the more favourable disposal of the peasant's produce will be provided. The economic regeneration of India would seem to depend largely on the co-operative development of its agriculture; and, when the dead wood has been cut away, rapid progress may be confidently anticipated.

As regards the care of cattle, in addition to the Imperial Institute of Veterinary Research at Muktesar, where sera and vaccines are manufactured, each province has a large veterinary staff, one of whose main duties is the inoculation of cattle as a preventative against rinderpest and other diseases. This staff also carries out the ordinary duties of veterinary surgeons. For the training of students in veterinary science there are colleges at Bombay, Madras, Calcutta, and Lahore, and two schools in Burma. A veterinary college is being constructed at Patna in Bihar. As the superior officers of the provincial civil veterinary departments are fully occupied with administrative and teaching duties, veterinary research has hitherto been practically

confined to Muktesar. A welcome departure in the direction of fostering investigation in the provinces is, however, now being made by the appointment of special research officers in the Punjab and Burma.

Throughout its long history India has, from time to time, suffered from famines of varying degrees of intensity. On the horrors which accompanied some of these early visitations, particularly those of 1630–2 and 1770, it is unnecessary to dwell: they can never recur. In more recent times, the most severe famines have been those of 1861, 1866, 1876–8, 1896–7, and 1899–1900. As indicated above, the Orissa famine of 1866 was the real starting-point of a concerted policy to provide against the recurrence of such tragedies, but it was not till 1901 and the following years that an effective scheme to deal with scarcity conditions was finally devised. It may be claimed that India is now in possession of a complete machinery to deal with the problem. Weekly crop reports keep Government informed of the incidence of the rainfall and the state of the crops in every part of the country. Every province has a programme of relief works ready for the emergency of famine or scarcity. Should any area give cause for anxiety, this programme is brought up to date, relief circles are formed, and tools and plant are assembled. If the rains fail, the collection of the revenue is suspended. Test works are started to determine the extent to which relief is required and, if full advantage is taken of these, relief works are opened. When the rains eventually break, workers are moved from the large relief works to smaller works near their own villages, so that they can go on with the cultivation of their fields. For this purpose loans for the purchase of seed, cattle, and implements are freely given. The necessity for further relief generally ceases when the autumn crop is reaped. Throughout all the period of

scarcity the most stringent action is taken by the medical authorities to prevent outbreaks of disease.

The elaboration of this protective system has practically put an end to famine on a large scale. We have seen that the various Famine Commissions emphasized the importance of irrigation and communications as protective measures. As a result of the recommendations of the Irrigation Commission, protective irrigation works have now been constructed on a large scale, particularly in the Bombay Deccan and the Central Provinces where the risk of scarcity is always great. A chain of protective railways has been practically completed. These works have been rendered possible by the existence of a Famine Insurance Grant, instituted in 1876 and funded by an annual allocation from general revenues of 15 million rupees. This fund is available for famine relief, for protective works, and for the relief of debt.

Widespread famine may now be deemed a thing of the past. Local scarcity there may be, but an efficient machinery exists to give relief. Improved communications facilitate the movement of grain from an area of plenty to one of scarcity, and work is ready to hand for which adequate payment is made. Relief funds, like the London Mansion House Funds,[1] will, it is hoped, no longer be required. A recent writer sums up the position as follows:—

'Everything goes to show that Government activity to save human life will never be wanted in the future on the colossal scale of former times, even so recently as 1899–1900. Each succeeding failure of the rains indicates that there has been in silent progress an economic revolution in India. In the year 1918 the rains failed more seriously and over a wider area than during any monsoon [periodic rainfall] in the recent history of India. The deficiency in the rainfall was more marked than in the great famine of 1899. Yet such was the increased

[1] These were 1874, £129,163 (Bengal); 1877, £515,200; 1897, £550,923; 1900, £394,021, amounting to more than a million and a half sterling.

resisting power of the people that instead of a demand for State relief from over five millions, the maximum number at any time in receipt of public assistance was never so large as six hundred thousand. The shock to the social life of the community was insignificant; the effects of the drought completely disappeared with the good rains of the following year.'[1]

[1] *The Indian Year Book, 1930*, p. 363. It should be noted that the year 1919 on the diagram on p. 171 means, as shown therein, April 1918 to March 1919, and thus covers the failure of the rains in the period of June to September in 1918, to which reference is made on p. 187.

Chapter XII

IRRIGATION

By SIR THOMAS R. J. WARD, C.I.E., M.V.O.

[Sir Thomas Ward has spent a lifetime in the service of irrigation. From 1883 he was identified with large constructive projects in the Punjab and on the frontier, and at Delhi up to 1913. For two years he was employed under the Government of Siam on the development of irrigation schemes in that country. He closed his Indian service as Inspector-General of Irrigation for all India from 1917 to 1922, after a period as Chief Engineer of the Irrigation Department in the Punjab. In recent years he has participated in irrigation work in Mesopotamia, Bulgaria, and South America. He is Past President and Life Member of the Institution of Engineers (India).]

IN parts of India the rainfall is so abundant and assured as to render irrigation superfluous or even injurious; elsewhere it is in all years so scanty as to make cultivation impossible without irrigation; but in the greater part of the country, the rainfall, though ordinarily sufficient, is so liable to periodic failure or unseasonable incidence as to call for irrigation as a protection against its uncertainty, whenever such irrigation can be supplied without excessive cost, or will enable the cultivator to pay for its cost by growing more valuable crops than would be possible without it. Irrigation, therefore, if only by village tanks or wells, has always been an accompaniment of cultivation in many parts of India.[1]

Modern irrigation in India was inaugurated in 1819, when Lieutenant Rodney Blane of the Bengal Engineers was sent by the East India Company to a site on the west bank of the Jumna river, 120 miles above Delhi, to re-open the canal made by the Mogul Emperor, Shah Jehan, for the irrigation of the gardens which the Emperor had

[1] Cf. the introductory chapter of the *Report of the Indian Irrigation Commission, 1903*, (London, 1905).

constructed at Delhi about the middle of the seventeenth century. The canal had become derelict during the decline of the Mogul rule which followed the sack of Delhi by Nadir Shah in 1739. After nearly a century of anarchy and misrule the Delhi territories had been assigned to the East India Company. One of their first tasks was to assist the re-population of the devastated tracts by restoring and then extending the irrigation works which had been constructed by the Moguls on either bank of the river.

After designing many of the works of what was then called the Delhi Canal, Blane met an early death from malaria; his grave is marked by an obelisk in the cemetery of Ludhiana on the banks of the Sutlej, then the frontier cantonment, and destined later to become the head-quarters of the great Sutlej Canal. After Blane there arose a school of capable and enthusiastic irrigation engineers, the most noted of whom was Colonel Sir Proby Cautley, K.C.B., F.R.S., then a captain in the Bengal Artillery. In 1840 he designed, and in 1843–54 built, the famous Ganges Canal, even now among the greatest and most complete irrigation canals in the world. It irrigates the neighbouring Doab (lit., two waters) or tract between the rivers Jumna and Ganges, that had suffered much in the great famine of 1835–8.

On the annexation of the Punjab in 1849 the need arose of works to occupy usefully the energies of the disbanded Sikh soldiery, and irrigation officers were obtained from the Jumna Canals to organize the improvement and extension of the indigenous riverain canals, mostly in the Multan district. The Chief Engineer, Colonel Robert Napier, afterwards Lord Napier of Magdala, himself alined a great canal down the ridge of the Bari Doab, the tract between the rivers Beas and Ravi. Sir John Lawrence, writing after the Mutiny to Lord Canning, said that the large and energetic development of labour under Napier's

advice and direction impressed the most manly race in India with the vigour and beneficence of British rule, maintained order and active loyalty during the Mutiny, and thus contributed to the recovery of Hindustan.

During the same period a similar school of irrigation engineers had arisen in the Madras Presidency, engaged in the development of the old-time irrigation works in the delta of the Cauvery river. The circumstances were very similar to those in the Delhi Territory. In return for the establishment of stable rule, the district of Tanjore among others was ceded in 1800 to the East India Company, which then became responsible for the upkeep of the great *anicut* or weir, a huge masonry work built on the Cauvery in the eleventh century, on which the prosperity of the delta depended. Eventually in 1836–8 Sir Arthur Cotton, then a captain in the Madras Engineers, so skilfully elaborated the works that Tanjore became the richest district in Madras, and so demonstrated their supreme importance during the great famine that Cotton was sent to examine and report on the Godavari Delta. His energy and capacity resulted in the construction of the great Godavari *anicut* and canals under his direction in 1847–52, and in the design of similar works on the Kistna that were carried out by others of his school in 1852–5.

In 1843 Sind came under British rule; the agricultural prosperity of this arid deltaic tract was entirely dependent on the irrigation obtained from an extensive system of channels, most of which, if not all, were once natural effluents of the Indus. The density of population was then small, about 16 to the square mile; and the canals were in a neglected state. The art of how best to use the fertilizing floods of this great river with the small means available, could only be acquired by long years of arduous work by able men in close touch with the people them-

selves; and it was not until the Commissionership of Sir Bartle Frere, from 1851 to 1859, that notable developments were called for. Progress was then very rapid and a school of engineers became established, who, as will be described later, have just built the largest irrigation system in the world, controlled by the greatest barrage of its kind in existence.

Not least among the works to which the East India Company devoted attention, are the innumerable tanks, a feature of the crystalline and sand-stone formations of the Indian peninsula. Some of these works are very large; two in Madras have a water spread of 9 square miles, and two are shown by their inscriptions to be over 1,100 years old, but many are very small and have been constructed by the occupiers of the soil. There are said to be 40,000 in Madras, 50,000 in the Central Provinces, and similar numbers in Mysore and Hyderabad. Only the larger tanks are in the care of the Public Works Department, minor works are in charge of the revenue officials, and many are privately controlled. This form of irrigation is practically unknown in the Punjab and Sind, but is common in all other provinces. The value of tanks has always been recognized, and great developments have been carried out under the stimulus of famine protection. The areas irrigated are very large. At the beginning of the twentieth century the Irrigation Commission [1] obtained statistics from all the important Indian States as well as from provinces in British India in which irrigation was practised and gave the following very interesting figures: population 270 millions, average area annually cultivated 297 million acres, of which the total area annually irrigated was 53 million acres; of this area 19 million acres were irrigated from

[1] Cf. Imperial Gazetteer of India, chapter on Irrigation by Sir Thomas Higham, K.C.I E. I may notice that this chapter is exhaustive up to the time he wrote (1903) and much of my information was obtained from it.

canals, 16 millions from wells, 10 millions from tanks, and 8 millions from other sources. The percentage of irrigation on area cultivated was then 19·5 in British India and 10·9 in Indian States in an ordinary year.

Irrigation from wells raises crops that are very valuable; their encouragement has always been the particular care of the agricultural department. Some twenty years ago a great advance was made by inventions in tube wells and in pumps; with the availability of electric power a great expansion in their use is expected, especially in tracts where the lifts are too great for bullock power. Recently (in 1931) three falls of the Ganges Canal have been harnessed to furnish 9,000 kilowatts of cheap hydro-electric power for the varied rural requirements of 10,000 square miles, including 66 towns, and two projects for pumping water sufficient for 80,000 acres annually.

The earlier irrigation works had been built out of revenue surpluses, and the next development was the construction of further works by private enterprise. Profitable though the first works were proving to be in many indirect ways, more especially in times of scarcity, this development had imposed a heavy strain on the resources of the East India Company, and the Court of Directors were loth to commit themselves to great schemes such as their administrators and engineers were prepared to urge on them. In 1857, therefore, the Court asked for proposals for new works in Madras to be constructed by private enterprise. Sir Arthur Cotton was then at the zenith of his career, and inland navigation was held by all to be ideal in a land where it was believed that the construction of canals which could be used both for navigation and irrigation would be a profitable undertaking. Two companies were formed: one in Madras, and the other, the East India Irrigation and Canal Company, in Bengal. After struggling for some years with their diffi-

culties, both failed and were bought out by Government, the latter in 1869 and the former in 1882. The schemes were unfortunate selections, and involved problems much beyond the experience available at the time; and, indeed, the projects have never since been completed. The Orissa Canals, made by the second company, however, have protected large portions of that province from famine and from floods, and have provided waterways; though their accounts show no direct profit to Government, they are a great asset.

While the Orissa Canals were under construction and the limitations of private enterprise were becoming apparent, the great famine of 1865–6 struck the tract; and a million died—one quarter of the population. To meet the urgent demand that this calamity produced, General Sir Richard Strachey, the first Inspector-General of Irrigation in India, prepared a scheme to construct irrigation works from loan funds. This scheme was urged on the Home Government by the Viceroy, Lord Lawrence, and in 1867 permission was granted to embark on a vast and comprehensive system of irrigation works. No project was to be taken up which did not promise to be remunerative within a given time, and whose earnings would not cover the interest on capital outlay. Thus were inaugurated the great productive works of irrigation, navigation, and embankments on which over £80 millions[1] (or 389 million dollars) have been spent up to 1928–9, for the annual irrigation of about 23,000,000 acres, yielding about 8 per cent. gross profit with a net return of nearly 5 per cent., after deducting 3⅜ per cent., the interest on the money borrowed.

In addition to this large sum, about £43¼ millions (or 210 million dollars) have been spent on unproductive

[1] As the statistics of rupees in this article cover a long period during which the rupee was at different rates of exchange, the sterling equivalents have been converted at the common rate of 10 rupees to a £ sterling.

irrigation works, securing the annual irrigation of about 4 million acres with a net loss annually of about £1,262,000, after allowing for interest at about 3¾ per cent. The most interesting part of this outlay has been that on famine protective works. The need for this form of expenditure arose out of the experience of years of scarcity and famine. which was shown to justify the construction of works not directly of a productive character. The subject was dealt with by both the Famine Commissions of 1880 and 1898. A famine insurance fund of £1,500,000 annually had been established, a limited part of which in certain circumstances could be used for railway and canal construction of this character. But no great progress resulted till finally the Irrigation Commission of 1901–3 were asked to define the limits of expenditure that Government might incur in such cases. They formulated rules that became the criterion for judging the suitability of any proposed famine protective work for its purpose. These have been for the most part reservoir projects, which were disqualified for construction from loan funds on account of the high cost of the dam. About £4,500,000 have been spent in the Bombay Deccan, most of it on works which form the largest of their kind in the world. In Bundelkhand, a part of the United Provinces peculiarly liable to drought, about £2,600,000 have provided a dozen or so of irrigation systems supported on storage. In the Central Provinces about £2,000,000 have created a very interesting series of storage works; here, in addition to costly dams, the very low water rates that crops so far removed from markets can pay add to the financial difficulties.

The earlier irrigation works were in populated tracts which in normal years were more or less self-supporting. With the coming of railways which gave access to ports, the influence of foreign markets was felt; irrigated areas expanded

and the class of the crops grown improved. In times of scarcity the superabundance found its way automatically to the stricken districts and helped greatly in their protection.

The progress on irrigation works in India thus falls into well-marked periods. The first was when the East India Company maintained and improved the indigenous works; and then launched out on great enterprises built from surpluses of revenue. The next period begins when the Crown, after taking over the government in 1858, realized the magnitude of the task of preventing loss of life in famine, and decided to employ loan funds to accelerate progress on beneficent works of a remunerative character. This period closed with the dire famine at the end of the century, when the Irrigation Commission of 1901 took stock of all that had been achieved: as a consequence of its labours, great schemes were inaugurated that were practically finished by the end of the war. New projects which were meanwhile under preparation were then undertaken in response to the stimulus given to all forms of enterprise by the war; the progress has been great, and these works are themselves nearing completion. A new period is about to begin with the construction of some of the many projects that are now under consideration.

By 1858 an experienced staff of officers, both administrators and engineers, was in existence. They had learnt their work by living an arduous and solitary life among a homely and virile people, and many of their names have become household words in the districts in which they worked. They and their successors designed and executed works of great magnitude, boldness, and originality. Among these were the Lower Ganges and the Agra Canals in the North-West (now styled United) Provinces, the Sirhind and the Swat Canals, and the remodelling of the Western Jumna Canal in the Punjab:

the Desert Canal in Sind: in Madras several dam schemes, besides the unique Periyar Dam project: in the Bombay Deccan, the Mutha Canal, or Lake Fife reservoir scheme, designed to supply drinking-water to Poona and Kirkee, as well as irrigation. The last named, begun in 1869 and finished in 1879, inaugurated the construction of great masonry dams built cheaply in uncoursed rubble masonry and mortar of local lime. The Periyar Dam project was under consideration as early as 1866; it was begun in 1876 and finished in 1895. The dam, 173 ft. high, is in an inaccessible tropical forest in the Travancore State. The supply is passed through the main watershed by a tunnel 1¼ miles long. Irrigating 176,000 acres, the scheme yields a return of 5½ per cent. on its capital cost of one million sterling. The head works of the Lower Ganges and the Agra Canals were the first in Northern India to be built like the *anicuts* of Madras on the bed of a sandy river. The remodelling of the alinement of the old Western Jumna Canal from the drainage to the ridges had been urged since 1844 when it had been proved, by means of Surgeon-Major Dempster's ingenious spleen index, that the prime cause of the excessive malaria was, so far as canal construction was concerned, the carrying of channels across drainages. The work was begun in 1876 and finished about 1882; it has been entirely successful in advancing the material and sanitary well-being of the tract.

The history of the Sirhind Canal originated in the early 'forties, when the administrators invoked the aid of their irrigation officers to devise means to prevent the bloodshed that sometimes occurred over the division of the waters of the Ghaggar, a hill torrent near the watershed of the Indus and Ganges. The project, eventually begun in 1870 and opened by the Viceroy in 1882, was notable in that it was designed to confer the greatest good on the greatest number,

irrespective of British and Indian State territory. The construction difficulties were very great, but the work has been a great success. The Swat Canal on the North-West Frontier was designed with political motives to give the Mohmands and other trans-frontier tribes agricultural prosperity in British India and thus establish friendly relations along the border. Alined on the skirt of the hills, the masonry works were numerous and costly; and the whole, proving more expensive than estimated, was transferred to the famine protective class. The conversion, however, of these barren treeless plains into a wide expanse of luxuriant cultivation, inhabited by a law-abiding and contented peasantry, produced unexpectedly large returns, and so the project was restored to the productive class—a unique experience.

After the opening of the Sirhind Canal the Punjab embarked on an experiment in irrigational colonization, whose striking success at the opening of this century had far-reaching, even world-wide, effects on irrigation developments. The province possessed two neglected assets whose development intrigued successive generations of administrators, namely, millions of acres of Crown waste in the fertile, but arid, spaces between the Sutlej and the Indus, and the superabundance of industrious and toil-inured peasantry in the over-populated districts in the submontane tracts. Proposals for great canals were often made, and some were even projected, but it was not until after the opening of the Sirhind Canal that the Government of India considered the time to be ripe for embarking on schemes dependent on the enterprise of colonists. The Lower Sohag and Para canals on the Sutlej, although only inundation canals, and the Sidhnai from a weir on the Ravi, though without a supply during the winter months, were an immediate success; but the Chenab inundation canal silted up, and colonization was delayed

till 1892 to permit of the building of head works similar to those on the Sirhind, Lower Ganges, and Agra Canals. By this time the colonization experience gained was so encouraging that the extension of irrigation to the whole of the tract between the two rivers of over 5,200 square miles was sanctioned. Great difficulties had to be overcome; those due to cholera and malaria were climatic; those due to lack of transport were removed by the construction of a railway and suitable roads, while those due to the enmity of the indigenous cattle- and camel-owners surrendered to generous grants of land and to firm administration. The colonists and authorities alike soon found themselves embarked on a co-operative enterprise, founded on reliable supplies of water conveyed by substantial works to good land under a sympathetic adminstration. About 1896 the years of scarcity began which culminated in the famine that closed the century; tenants came flocking to these irrigated lands from the smitten districts of the province and from Rajputana; not only were all the branches of this canal rapidly completed and colonized, but the Jhelum Canal was also finished by 1901. Up to date a sum of about £8 millions has been spent on the three largest of the colony canals which irrigate about 5 million acres. The net profit after paying $3\frac{1}{3}$ per cent. for interest on the money borrowed is alrcady over 30 per cent.

After the impetus given during Lord Curzon's administration, £$16\frac{3}{4}$ millions of productive works and £$13\frac{1}{2}$ millions of protective works, or £$30\frac{1}{4}$ millions were added to the total outlay of about £$39\frac{1}{2}$ millions as it was at the end of 1903; and over 4 million acres were added to the annual irrigated area of about $12\frac{1}{2}$ million acres. Even so the famine protective works had not been exhausted; only those shown to be most needed by the experience of the great famine were built, to be followed by more in the

period since the war. All the works, productive and unproductive alike, are of an interesting character. Some of them owed their origin to the stimulus to investigations given by the impending arrival of the Irrigation Commission; for instance, the Triple Canal and Upper Swat River Canal Projects. The head works of the latter are in tribal territory and the supply is passed through the range of mountains by a tunnel. The political effect of this canal was an asset in the Great War. The Triple Canal project utilizes the surplus waters of the Jhelum by exchange with the Chenab for the colonization of the far-distant Lower Bari Doab, thus setting free the water of the Beas river for the irrigation of the vast areas on the left bank of the Sutlej in British, Bahawalpur, and Bikaner territories that could not otherwise have been developed.

Among the protective works in the Bombay Deccan are the Bhandardara (or Lake Arthur Hill) dam, 270 ft. high across a gorge in the Western Ghats, and the Lloyd dam at Bhatgar, 190 ft. high and 4,300 ft. long, the largest mass of masonry in the world; the latter has replaced the smaller and very successful Lake Whiting dam built in the 'eighties.

It may be noticed that in Lower Burma the rainfall is ample, and this, with the richness of the deltaic land, accounts for its wealth in rice; but in Upper Burma the Arakan Hills divert the rainfall, and a dry zone results from which the people migrate seasonally to labour in the rice fields. On the annexation of Upper Burma in 1886, attention was concentrated on the repair and extension of the indigenous works; later, the art acquired in India was applied to the construction of four modern canals that have helped to stabilize the people in the dry zone. The indigenous river embankments in Lower Burma were improved and extended, and progress on these works still continues. In Rajputana, again, about £355,000 have

been spent on unproductive works irrigating about 33,000 acres annually, and in Baluchistan £330,000 to irrigate 22,000 acres annually. The works are small and numerous, but very valuable in these desert countries.

Great progress has also been achieved in some of the Indian States. Patiala, Nabha, and Jind have shared in the cost of the Sirhind Canal, and the first named in that of the Sirsa Branch of the Western Jumna Canal. Bikaner and Bahawalpur share in the cost of the Sutlej Valley project as described below. Mysore, Hyderabad, and the Central Indian States, more especially Gwalior, have constructed many large and numerous small irrigation works. In Rajputana, too, there are many interesting and valuable irrigation works. The next serious failure of the rains will find all Indian States with vastly increased powers of resistance.

Up to 1918, the amount spent on irrigation, in both productive and unremunerative works, was £74 millions (or 360 million dollars) and the area irrigated annually was 21 million acres. The projects sanctioned since 1919 and now approaching completion are estimated to cost over £49 millions (or 238 million dollars), and they will irrigate nearly 13 million acres. The magnitude of some of the new projects exceeds that of any previously undertaken. With the Metur dam, Madras has begun the construction of high masonry dams in the valleys of her great rivers. The Sukkur Barrage, opened in January 1932, in Sind, is the largest of its kind in the world. The Damodar in Bengal is a rice canal and will also furnish drinking-water for the villagers. The project for a canal from the Sarda river for the irrigation of Oudh, the garden of India, would have been executed during the last century but for the opposition of the landholders: then drought overcame their stubborn preference for well irrigation, and a canal for Oudh was constructed and opened at the end of 1928.

The Sutlej Valley project, by means of four great barrages with steel superstructures suitably situated along 280 miles of the river, converts existing inundation into controlled summer or non-perennial irrigation, and provides for the colonization of vast areas. The three upper barrages and their canals have been opened, and the fourth is approaching completion. For the first time in Indian canal construction concrete lining has been used as a precaution against absorption losses on some 80 miles of the feeder canal to Bikaner territory; the results have been profitable. Mechanical excavators too have been employed on these Punjab and Sind Canals with success to supplement the labour force, thus inaugurating a great change, in that, hitherto, canals have been built by the people themselves during the months in the year that they are free from their agricultural pursuits, indeed the earlier canals were designed to be made throughout by the village labour resources. With the advent of workshops, about 1870, the regulation apparatus was elaborated, but even now, when steel barrages are used and machine tools more largely employed, the bulk of the expenditure is in the country to be irrigated, and affords a valuable economic as well as political asset to the administration of the Province.

Now that construction is approaching completion, attention is being concentrated on the projects that have been under investigation, so that the staff and labour force may continue to be utilized so far as finances will permit: there are promising schemes available in several provinces to occupy another decade or so. The Punjab has still some very large projects under consideration. The Sind Sagar Doab, the last to be developed, was among the first to attract attention after the annexation of the Punjab; but the more promising results offered by those tracts which have already been developed, led to its postponement. The

proposed storage on the Sutlej at Bhakhra is of world-wide interest. A special committee of civil engineers and geologists presided over by the late Mr. A. J. Wiley, Consulting Engineer of the Reclamation Service of the United States of America, has approved technically of the project for a dam 500 feet high to store water sufficient to give a liberal supply for 6 months. The scheme will benefit a tract of 12½ million acres, of which 4½ million acres are populated villages not otherwise protectable from drought, while the supply to the existing areas will be greatly improved. A higher dam is under construction on the Colorado River in the United States; but though that is to be 750 feet high and to hold the whole flood discharge of that river, the supply will not be so good as that from the snow-fed Sutlej. The aim of the project is to protect that part of the south-east Punjab for which neither the Jumna or the Sutlej has water enough to serve, but which nevertheless supports a large population that is driven by the droughts that have a cycle of about 30 years to seek hospitality in the irrigated tract from the families into which they have had the foresight to marry. Before storage water could be diverted from the Sutlej it was necessary to obtain complete control of its normal flow to assure the supply to the tracts it commands. The completion of the Sutlej Valley and Sukkur Barrage projects has secured this; and the time has now come to build the dam and its connected works to protect the only part of the Punjab now liable to the scourge of famine.

When the time comes to sum up the achievements of British rule in India, no name will stand higher on the roll of India's benefactors than that of the irrigation engineer. His achievement may be shortly expressed in the statement that the estimated value of the crops raised annually on the areas receiving State irrigation is more than the total capital outlay on the works themselves.

Chapter XIII

RAILWAYS

By SIR CLEMENT HINDLEY, K.C.I.E., M.INST.C.E.

[Sir Clement Hindley has had a long connexion with the Indian Railways. He went out as an Engineer on the East Indian Railway in 1897, and rose to be its Secretary and Deputy-Agent, becoming Agent or General Manager in 1921. After being Chairman of the Commissioners of the Port of Calcutta he was selected in 1922 to be Chief Commissioner of Railways in India, a post which he held till 1928.]

IN the three-quarters of a century since the opening of the first railways in India, there has grown up a system of communications covering the whole Empire with a network of trunk-lines and branches. In this period changes in means of travel and transport have revolutionized men's ideas about time and distance, have destroyed the geographical boundaries which for centuries divided races and communities, and have banished the nightmare of uncontrollable famine.

Amongst the countries of the world India, with nearly 42,000 miles of railway, occupies the third place. The system represents a capital investment of some £640 millions sterling (or 3,114 million dollars), carrying in a year over 600 million passengers at an average charge of about a third of a penny a mile, and nearly 90 million tons of goods at an average charge of rather more than a half-penny a mile. Of this great property the State owns seven-eighths of the capital, and three-quarters of the route mileage; also it is directly responsible for the management of nearly 19,000 miles and exercises large powers of technical and financial control over the remainder. These broad facts are the frame of the picture, which has as its background the daily life of millions of India's people.

Great Britain, the pioneer of railways, had been using them in increasing measure for some twenty years when surveys commenced about 1845 on both sides of India for possible routes leading from the sea-front at Calcutta and Bombay to the interior. In 1849 the work of construction commenced almost simultaneously on the Calcutta and Bombay sides; and in April 1853, a railway from Bombay to Thana, 21 miles long, was opened, while in August 1854, a line was opened from Howrah, near Calcutta, to Hooghly, a distance of some 24 miles.

This brought the possibilities of railway development prominently before the East India Company; and Lord Dalhousie, who had become Governor-General in 1848, formulated in 1853 the outlines of the future trunk railways. These were a line from Calcutta to the North-West (now United) Provinces to be extended to Lahore; a line from Bombay to 'some point in Hindustan'; a line connecting Bombay and Madras; and a line from Madras to the Malabar coast. The scheme contained the framework of the whole system as it exists to-day: it has thrown out branches and connecting links in all directions. Connected with this system are the various lines built in the frontier districts for strategic and defence purposes which have played their part in stabilizing political and economic conditions along the whole of the North-West Frontier as far as Quetta in Baluchistan. In addition to this main framework there grew up a separate system on the metre gauge serving the whole of Rajputana and running to the borders of Sind, the Punjab, and the United Provinces; and this metre-gauge network has been gradually extended over the whole of Southern India, giving access to the extreme South and to Ceylon. The metre gauge has also been used to develop the hill tracts of Assam and to provide Burma with its own isolated system. One of the latest additions

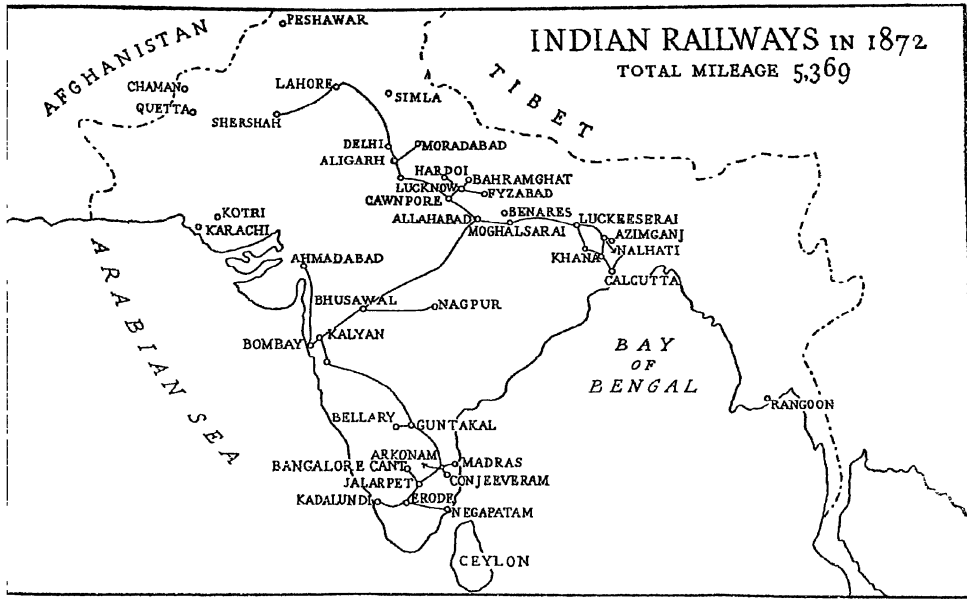
to trunk routes has been the line built during the war from Quetta across the Baluchistan desert to the frontier of Persia, while more recently lines have been completed in Central India and Hyderabad which, with previously existing lines, form a trunk route between Madras and Delhi. The Central Provinces have obtained direct access to the sea by the construction of a line to the new port of Vizagapatam.

Apart from the obvious advantages of connecting up trade and industrial centres with one another, and the ports with the great areas of production and consumption, the construction of railways has created new areas for cultivation in conjunction with irrigation schemes, and has enabled mineral wealth to be developed in many parts of the country. Areas, for instance, in the Punjab, which half a century ago were uninhabited desert, now maintain a population of over three million cultivators who have exported up to a million tons of wheat in a year through irrigation. The coal-fields of Bengal and Bihar, where before the coming of railways coal was laboriously worked from a few outcrops and carried by bullock cart or river barge to the port, now produce some twenty millions of tons of coal yearly, which has been used by shipping as far west as Port Said and as far east as Singapore. The carriage of coal at cheap rates has been the means of creating great industrial centres like Cawnpore, Ahmadabad, and Tatanagar, the latter now producing steel of fine quality, sufficient for a large part of India's consumption. Hence, India's industrial and commercial development has in fact largely grown up on the framework of railways which was sketched out in 1853. (See the maps on pp. 208, 209).

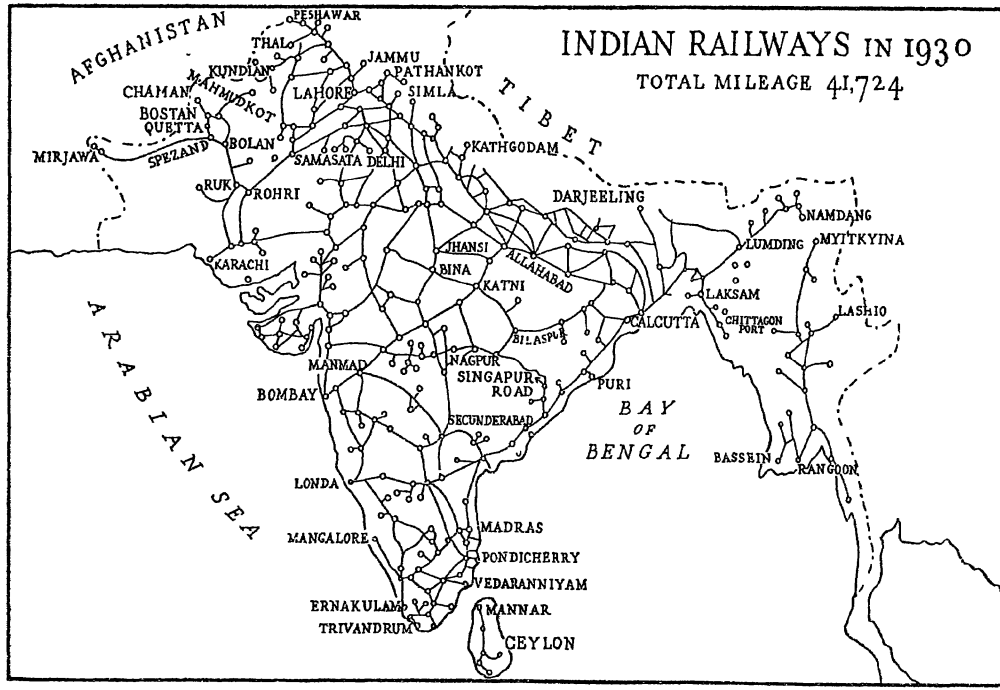
The history of railway construction has been one of almost continual development in which the State has taken a leading part, either by giving guarantees to companies

or by construction by direct Government agency. The Government of India have never swerved from the view of railways enunciated by Lord Dalhousie as 'national works over which the Government might justly exercise, and was called upon to exercise, a stringent and salutary control'.

The earliest policy was to encourage private enterprise; and under the contracts made with the East Indian and Great Indian Peninsula Railway Companies, interest on capital was guaranteed, and the Government had the right to purchase the property after the first twenty-five years or the first fifty years. In these contracts were laid down the extent of Government control in regard to standards of construction, accounts and returns, and regulations for operating traffic. This policy of construction and management by means of guaranteed companies continued until 1868, when some 1,800 miles had been constructed. Although the policy of Government was to avoid State ownership and State management, a clause in the contracts of the guaranteed companies, giving the company the right to surrender voluntarily its property to Government at six months' notice, was made operative in the case of the Calcutta and South Eastern Railway, which had proved unprofitable, and the Government became the owners of this railway in 1868. At about the same time the whole question of construction again came under review and, along with the decision in 1869 to undertake construction by direct Government agency, another decision was taken which had far-reaching effects. This was that the standard gauge of 5 ft. 6 in., hitherto adopted, should be continued for new trunk-lines, but that the metre (3 ft. $3\frac{3}{8}$ in.) gauge should be used for subsidiary lines. The new policy of State construction proceeding side by side with construction by companies led to the completion by 1880 of some 2,709 miles of State railway and 6,095 miles by



[From *India in 1929–30.*]



[From *India in 1929–30*.]

company agency. The famine period, 1874 to 1879, drew attention to the necessity for an accelerated programme of construction in order to facilitate the movement of foodstuffs; but financial stringency, arising from the Afghan War, caused Government to have recourse again to company agency, with the result that the Southern Mahratta Railway, the Indian Midland Railway, and the Bengal Nagpur Railway Companies were floated on terms which were distinctly more favourable to Government than the old terms. The Rohilkhand and Kumaon Railway and the Bengal and North-Western Railway were amongst the additions to the railways constructed by companies, but in these cases the Government gave no guarantees as to interest on capital, although reserving the right to purchase after a stated term of years. By the year 1893, or forty years from the opening of the first railway, the mileage had grown to over 18,000, and in the next twenty years 35,000 miles had been reached. In the ten years following 1913 barely 3,000 miles were added; but since 1923 an active programme has again been pursued, and by March 1930 the total mileage had reached 41,700, while 1,270 miles were under construction.

From the small beginnings of 1869 Government became gradually the direct owner and manager of three considerable systems, the North-Western Railway, covering practically the whole of the Punjab, and now the largest railway in India with a mileage of over 5,200 miles; the Oudh and Rohilkhand Railway, serving the territory to the north of the Ganges in the United Provinces; and the Eastern Bengal Railway, connecting Calcutta with the eastern part of Bengal and with Assam. In 1925 these State railways had a mileage of 11,000; but in that year, under the operation of the terms of the contracts, the East Indian Railway and the Great Indian Peninsula Railway

came under the direct management of Government, thus adding some 6,000 miles to the State railway system. On the 1st of January 1929, the Burma Railways passed from company management to the State, and at the present time, therefore, the Railway Board, which is the Department of Government concerned, has the direct management of some 18,680 miles, or rather less than half the total railway mileage. Of the balance, 13,855 miles owned by the State are managed by companies, and the remaining mileage is owned and managed either by companies or by Indian States.

Controversy on the relative merits of State and company agency for construction and management has at times assumed a political aspect, and it has always raged fiercely when contracts with companies reached a point where Government might exercise the option to purchase and manage. National sentiment is strongly opposed to management by a Board of Directors in London, and the present policy of Government favours transfer of such management to India whenever it is possible to do so under the operations of the contracts. Whether the future will see a further extension of direct State management or the evolution of some form of company management in India remains to be seen; but the addition of the East Indian and Great Indian Peninsula Railways to the State system in 1925 gave many opportunities for consolidation and elimination of overlapping in administration.

The State has thus come to own the major portion of the Indian railways, partly by purchase and partly by direct construction. Apart, therefore, from the natural governmental functions of control in such matters as safety of the travelling public and railway servants, rates and fares, and the enforcement of responsibilities towards the public which are the corollary to the possession of a virtual

monopoly, the Government has perforce to exercise considerable financial and technical control over the managing agencies of company lines in addition to the direct management of the State-managed systems. Various systems of control were in force from time to time and led in 1905 to the establishment of a Railway Board, consisting of a chairman and two members, vested with the control of all railway matters under the administration of the Department of Commerce and Industry in the Central Government. Later, the Railway Board became a separate department of the Government of India, with various technical branches. In accordance with the recommendation of the Railway Committee of 1921, a Chief Commissioner was appointed in 1922 to preside over the Railway Board, with the powers of a Secretary to the Government of India. The Board, as now constituted, consists of the Chief Commissioner, the Financial Commissioner, and two members who are experienced railway officers. They are assisted by Directors in charge of the different branches, such as Finance, Civil Engineering, Mechanical Engineering, Traffic, and Establishment.

One of the most important reforms which followed the reorganization of the Railway Board was the separation in 1924 of the railway finances from the general finances of the country. The growth of the financial interests of the State in the railways and the continual increase in the volume of railway revenue and expenditure had made the railway accounts a very important factor in the annual budget of the Government of India. As the financing of new capital works and new construction was dependent from year to year on the general financial situation of the Government of India, it became difficult to proceed on a regular programme with continuous development and with the replacements of worn-out track, bridges, and rolling

stock. The railways, after the close of the war, were in consequence in a parlous condition, both financially and materially. The Railway Committee of 1921 recommended a bold policy of expenditure, and the central legislature, as reconstituted after the 1919 Reforms, decided in 1921 to allot a yearly sum of 300 million rupees for five years for improvements and development described comprehensively as 'rehabilitation'. Eventually in 1924, a scheme for the separation of railway finance was carried out by a convention passed by the central legislature. The railways are to be responsible for the interest on the capital invested and to make a further contribution of 1 per cent. on that capital to the general revenues. Surplus profits are to be divided on an agreed ratio between the railways and the general revenues, the railway portion being used for the formation of a reserve to meet contributions to the State in lean years. For the period up to 1929 a substantial railway reserve was thus built up, but in the two subsequent years part of the reserve had to be utilized in order to meet the due contribution to the general revenues. Although this convention does not amount to a complete formal separation, it does afford considerable freedom in the execution of continuous programmes of renewals, and has the additional advantage of enabling the central legislature to examine and deal with the railway budget separately from the general budget. The vigorous policy of capital expenditure from 1922 to 1929 may be realized from the fact that in these years £110 millions were spent, including £28 millions on new construction. The total *net* gain from the State railway property in those years was £50 millions (or 243 million dollars), of which £25 millions went to the State, £15 millions into the railway reserve, and £10 millions to the depreciation fund.

In technical matters Indian railways have reached a

high state of development. The diverse physical characteristics of the country, its extremes of temperature and humidity, the magnitude of its waterways and mountain ranges, its wide range of geological formation, gave to the engineers problems to solve which were greater in complexity and uncertainty than any hitherto encountered in Europe. The boldness with which the engineers attacked these problems and the success which attended their efforts are very remarkable. At the time of the Mutiny in 1857 British engineers had organized railway construction over many hundreds of miles between Calcutta and Delhi. The memorials of many of them show their courage and devotion to duty. Many rivers had been bridged, and the excellence of material and design of the early work is testified to by the fact that some of the wrought iron bridges built round about the year 1866 were in existence and in good condition until renewed by steel girders during the last few years.

Progress in technical work, both as regards civil engineering and rolling stock, was never much behind the standard reached in the West, on account of the close connexion maintained through consulting engineers in England, and the import of such manufactured stores as could not be produced locally. But in many respects the opportunities of technical development were greater in India than elsewhere by reason of the multiplicity of the engineering works and their relatively greater magnitude. In consequence there are many instances in which technical development has been on the whole well abreast of that reached in England.

The use of safety devices and the care taken to ensure that the operating staff are efficient in their duties has resulted in a freedom from serious accidents which compares well with the railway systems of other countries. In 1929–30, for instance, the number of passengers killed in accidents was

only 358 out of 634,297,400 passengers carried, while the number injured in the same year was 1,126.

Of all branches of technical railway work in India, bridge-building is perhaps the most widely representative of the diversity of engineering skill in overcoming physical difficulties. In the early days of construction the brick or stone masonry arch was predominant, and there are still many examples of fine workmanship of this kind. With the introduction of wrought iron, and later of steel, larger spans became possible, with the concurrent need for further development in the technique of foundation work. Many large steel bridges have been constructed, accompanied in some notable cases by schemes of river training in order to confine the river running through alluvial plains to a permanent course. The longest of these bridges, and still the longest bridge in the world, is that over the Sone River on the East Indian Railway in Bihar, where the waterway is spanned by a viaduct of 98 steel spans of 100 ft. each. Other notable bridges are the Lansdowne Cantilever Bridge at Sukkur over the Indus, the Hardinge Bridge over the Ganges, the Jubilee Bridge over the Hooghly river above Calcutta, the Bally Bridge over the same river, which has recently (August 1931) been opened, and many others. Each of them in its time represented probably the summit of professional engineering skill; but each of them contributed something to the steady advance in economy and efficiency in design which has taken place on all railways since their opening and has made possible the use of heavier rolling stock. The engineer has accordingly been faced with a continually more complex problem in structural design; and there has been a pooling of experience and a standardization of design.

This adoption of general standard designs of locomotives, rolling stock, and track, coming at a time when national

policy favoured increased encouragement of local industries has led to valuable industrial development. Steel girders for bridges of the largest spans are now constructed in India from Indian steel produced at the Tata works. Waggons and underframes are now mostly manufactured in India, and India is capable of producing practically the whole railway requirements of rails, fishplates, sleepers, whether of timber, cast iron, or steel, and many other categories of railway stores.

The adoption of a standard gauge of 5 ft. 6 in. instead of the standard 4 ft. 8½ in. in Western countries gave Indian railways a great advantage in carrying capacity in both goods and passenger stock. For many years wagons of 20 tons capacity have been used and the present standards go well above this figure. Coal trains carrying 1,200 tons run between the coal-fields and the Calcutta docks, and passenger trains, of 12 bogie coaches, each 66 ft. long and weighing 50 tons, have been in use for many years. The vast majority of passenger traffic, more than 98 per cent., is third class, and the usual type of coach is a large open vehicle with lavatory accommodation at either end. Upper-class passengers are usually accommodated in a compartment with longitudinal berths, two lower and two upper, each compartment having a lavatory and bath. Electricity for lighting has now almost entirely taken the place of gas, and is used to operate ceiling fans in the upper-class stock. Speaking generally, both in speed and comfort railway travelling in India for all classes compares very favourably with that of other countries.

The railway workers of India form an important part of the population, numbering 819,000 men, of whom nearly 473,000 of all grades are Government servants. There is, perhaps, no more striking evidence of the growth of a great new industry than this formation of a body of men through-

out the country who are skilled in a new trade which was unknown in India 80 years ago and whose annual pay-roll amounts to £30 millions (or 146 million dollars). And not one trade alone—for modern railway working involves specialist work in a large variety of trades. Here, in India, is a human agency not very different in composition from the railway organizations in other countries; but, considered in detail, no other country could present so many divergencies in human material and in standards of education, culture, and physique. Considered from the point of view of the great communal divisions of population, there are some 580,000 Hindus, 182,000 Muslims, nearly 15,000 Anglo-Indians, 27,000 other classes, and less than 5,000 Europeans. In the lower ranks the personnel is recruited largely from the agricultural classes, and in spite of the tendency to heredity of occupation, especially in the larger railway centres, a large majority of railway men would be found to have agriculture as a second trade, available to them in case of loss of railway work. For this reason the troubles of unemployment have not been known much in the past, and in times of plenty difficulties in recruitment have not been unknown. But it is to the classes who have benefited by education that the growth of railways has afforded the greatest opportunities. Literacy is now a prerequisite to employment in many grades, and higher education is the avenue to the supervising and superintending grades in the service. The university graduate has to pass through the gates of fierce competition to qualify for appointment to the superior railway services; but the Public Services Commission, who now supervise the machinery for appointment to the State railways, have no lack of material from which to select probationers. On all railways, whether State or company managed, the policy has been adopted of filling 75 per cent. of the vacancies in

the superior services by appointment in India. Whereas in former years the majority of appointments were made in England, the percentage of Indian officers on all railways rose from about 24 per cent. in 1925 to 34 per cent. in 1930, while on the State-managed railways the percentage in the latter year was 37 per cent.

An important system of recruitment and training of officers has been established on the State-managed railways and is shared in varying degrees by the company-managed railways. The transfer of the main recruitment from England to India necessitated special steps to ensure complete training in the particular branch concerned in lieu of the practical training or specialized education which usually preceded appointment when recruitment was done in England. The entrance to the service is by competitive examination after previous selection by provincial selection committees, each province having its quota of candidates. The successful candidates are appointed as probationers, and then go through a specialized course which includes both theoretical instruction and practical experience on the railway in a carefully designed curriculum. Throughout the probationary period the training is supervised and directed by the Railway Staff College at Dehra Dun, which was opened in 1930. At this College, which is specially equipped to deal with all branches of railway operation, there are also courses for both junior and senior officers who are already in the service, and it fulfils much the same function towards the railway services as the Military Staff College does for the Army.

But it is not only in the superior services that the principle of instruction and education in normal railway duties is carried out. Each of the large State-managed systems now has its Transportation School, where courses of instruction are given to probationers for the subordinate

supervising staff and to many other classes of employees to enable them to qualify for better positions. The effect on the efficiency of the staff generally, since the establishment of these schools, has been very marked, and the standard of work generally has been definitely raised.

Trades unionism on the railways has had a long and uphill struggle in India, and, until recently, the principles underlying the system, as established in Western countries, were imperfectly understood, even by those who sought to fill the role of leaders. In many ways the continual solicitude, shown by Government and by the various railway administrations towards labour, and the practical steps taken to improve its conditions have perhaps left little room for any decided impetus towards organization into unions. But on the other hand, in times of misunderstanding and dispute the management has felt the need of an organized representation, with which to negotiate and to whom to look for the carrying out of engagements. In recent years there have been set up on most of the railways special branches to deal with labour questions, and in particular to see to the application of the various International Labour Conventions, to which India, as a member of the League of Nations, has been a party. A special branch of the Railway Board, with one of the members in charge of it, has been established, and this has enabled great progress to be made in the study of labour problems.

Although in the last two years earnings have dropped considerably, as in other countries, the railway property of the State in India is an asset, the like of which is perhaps owned by no other country; for the capital of £559 millions (or 2,720 million dollars) invested in railways represents the major portion of the national debt, and earned on an average $5\frac{1}{3}$ per cent. during the five years 1924–9.

Chapter XIV

PUBLIC FINANCE

By THE RT. HON. LORD MESTON OF AGRA AND DUNOTTAR, K.C.S.I., LL.D.

[Lord Meston entered the Indian Civil Service in 1885, and became Financial Secretary to the Government of the United Provinces in 1899. Five years later he went to the Transvaal as Adviser to the Governments of Cape Colony and the Transvaal on Civil Service reform. For six years from 1906 he was Secretary to the Finance Department of the Government of India, and then went to the United Provinces as Lieut.-Governor. Thereafter, on appointment as Finance Member of the Government of India, he was called to take a leading part in shaping the Montagu-Chelmsford Reforms, and was Chairman of a small Committee on Financial relations which evolved the much discussed 'Meston Settlement' between the provinces and the Central Government.]

NOWHERE is the dependence of India on her sturdy peasantry more in evidence than in the field of Public Finance. Given a year of good harvests, with normal prices, and the State revenue booms. Agricultural products of all sorts—wheat, cotton, jute, oilseeds, rice—move freely and swell the railway returns. Exports multiply, exchange gets firmer, and the Government saves on its foreign commitments. Imports also go up, silver pours in, and the customs receipts soar. In the provinces, the land revenue is promptly paid, court fees rise and excise is active. All along the line, budgets balance, or surpluses rejoice the Treasury heart. If the rains fail and the harvests are poor, the whole picture changes. Unemployment and distress call for heavy expenditure on relief measures; land revenue has to be remitted; excise, the stamp revenue, school fees, all decline; and the provincial balance dwindles. The Central Government is in

no better state. Imports are checked and customs fall. With diminishing exports the exchange weakens and the Government's remittances are more costly. The railways suffer, both in freights and in passenger fares; and a score of minor conduits into the exchequer run slower. The Finance Minister has to patch up a deficit and to curtail beneficial expenditure. (See the diagram on p. 171).

Of recent years, new factors have tended to obscure the immediate reaction of the Indian budget to a good or a bad monsoon. On the one hand, the armoury for fighting famine has been perfected, and the revenue from industry and commerce has been greatly enhanced; on the other, movements in international prices have swept across India with disastrous force, and the world-wide glut of primary products is hitting the Government almost as hard as the peasant. Nevertheless, agricultural prosperity or depression is the permanent warp of Indian finance; and if we remember this, and also that India is an advanced socialist in her State activities, we are half-way to an understanding of the Indian budget. It is a complicated and technical document, however, and there are various perfectly legitimate methods of presenting the national income and expenditure. In the first place, the budget in India is not one, but many; for besides the budget of the Central Government at Delhi, each of the major provinces, i.e. each of the nine provinces which have Governors and separate Governments, has a budget of its own. Thus, for a complete view of State finance, we should have to add up the figures of ten different and contemporary sets of estimates. In the second place, the form of the budgets and the accounts, and the currency in which they are kept, have frequently altered, particularly in regard to the self-supporting or commercial services. For this reason, comparisons with past years are often misleading.

Revenue.		*Expenditure*	
CENTRAL			
	£ *mill.*		£ *mill*
Customs	37 0	Defence (net)	41 3
Taxes on Income	12·5	Debt: Interest	7 6
Salt	5·7	Capital	4 1
Railways	3 9	Civil Administration	5 5
Opium	2·4	Frontier and Political	3 1
Currency and Mint	2·2	Collection of revenue	3 0
Interest	2 1	Posts and Telegraphs	0 6
Other sources	4·2	Other heads	5·0
TOTAL	70 0	TOTAL	70 2
PROVINCIAL			
Land Revenue	24 6	General public services	11 6
Excise	14 6	Education	9 6
Stamps	10·1	Public Works	9 6
Forests	4 1	Police	9 0
General public services	3 3	Collection of revenue	8 0
Interest	1 8	Medical and Hygiene	4 4
Irrigation	1·2	Law and Justice	4 3
Registration	1·1	Debt: Interest	1 5
Other sources	3·3	Capital	0 7
		Agriculture	1 9
		Other heads	4 6
TOTAL	64 1	TOTAL	63 2

This is true also of the foregoing tables. They are intended to give a condensed picture of the actual revenue, and the expenditure debitable to revenue, for a recent and reasonably normal year, 1928–9. But they do not coincide with the published accounts, mainly because, against the three leading commercial departments—railways, posts and telegraphs, and irrigation—they show only the net profit or loss, after the earnings have been charged with the working expenses, as well as with that part of the public debt which is treated as having been incurred for their capital requirements. Similarly, the cost of defence is given at its net figure, after deduct-

ing the miscellaneous military receipts. Subject to these explanations, the tables indicate the main sources of revenue, and the main heads of expenditure, first for the Central Government, and then for the nine major provinces combined. Had they been prepared before the war, they would have shown the pillars of the exchequer as being, first, the rent (or tax) levied on the land by the State as its proprietor-in-chief (see Chap. X); with customs and excise (see Chap. XV) in the second rank; and salt, stamps, and the income-tax in the third. Since the war the emphasis has shifted; no great expansion has taken place in the land-revenue, while the taxation on incomes and the customs tariff have been steadily enhanced, their proceeds having been respectively doubled and trebled within twelve years. Considerable elasticity has characterized most of the other heads of revenue, with the exception of opium, which has a story of its own (see Chap. XV). Expenditure, however, has more than kept pace with the improvement in income, particularly on the social or 'nation-building' services, and on the new machinery of government.

As between the central and the provincial authorities, the division of functions has long followed the natural lines; but the division of financial responsibilities has had a protracted and controversial history. From their former role of mere agents for the Central Government, the provinces have been steadily advanced to a substantial measure of independence, and since 1928 they have been finally relieved of the much-resented contributions which they used to have to make to the central exchequer. Yet further adjustments will be necessary before a satisfactory system of federal finance is reached. The Indian States have a grievance in the fact that British India keeps all the proceeds of such monopolies as the customs duties and the

salt excise, although their subjects contribute in much the same ratio as the British Indians. The provinces again, or some of them, have a grievance against the Central Government because it annexes virtually all the income-tax and leaves none of that source of national wealth for local needs. The candid observer, however, sees that the Central Government shoulders the whole cost of the defence of the country, of its diplomatic services and of its unremunerative debt, and reflects that the money must be found somewhere if federation is ever to be a reality.

Leaving the national debt for separate treatment, we may now get into closer touch with the fiscal system of the country by looking in some detail into the main spending departments, and then inquiring how they are fed. Dominating all the others is the *Military organization*, oft-times assailed as draining the life-blood of a poverty-stricken land. In reality there is no 'mailed fist' about India. She has the embryo of a navy of her own; but otherwise the £100,000 subsidy which she pays the British Admiralty is her whole outlay on the protection of her vast seaboard. For internal security, and the constant menace on her frontier, she maintains an army (see Chap. V) at the lowest strength compatible with the discharge of those duties and the fulfilment of treaty engagements with the self-governing Indian States. The burden on the central budget, if we look at it alone, is heavy; and even when, as is clearly right, we relate the cost to the central and the provincial revenues taken together, it comes to between 25 and 30 per cent. of the State's resources, according to how they are calculated. Nevertheless, of the sixty larger nations of the world, India has the lowest percentage of military man-power to population, and her bill for defence divides out to about 3*s.* 6*d.* (or 85 cents) per head of her people.

Next in order of expenditure comes the group of great domestic or social services—*Education*, *Medical Relief*, *Public Health*, and *Public Works*. Between them they cost within 70 per cent. of the outlay on Defence, a ratio which in the West would sound incredibly low. It is a ratio, however, which has risen rapidly in recent years. All these services are now under the control of Indian Ministers in the provinces, and the limit to their expansion is the responsibility which Ministers are prepared to take in raising the necessary funds by increased taxation. Pressure is frequently exerted to release money for the purpose by curtailing the expenditure on *Police*; but this is overborne, whenever communal friction runs high, by demands that the force be strengthened for the greater security of the public peace. Under the heading of *Civil Administration*, the Central Government provides the large staff for keeping and auditing the public accounts, a variety of scientific departments —survey, archaeology, geology, meteorology, &c.—the head-quarters personnel at Simla and Delhi, and the ordinary administration of the minor provinces which have not Governors of their own. Similarly in the provincial table, the rubric of *General Public Services* includes a moiety of the cost (shared with *Law and Justice*) of the whole of the magistracy in India, the upkeep of the jails, the head-quarters establishment of the different provinces, and such miscellaneous services as the inspection of factories and the development of industries.

For the revenue side of our tables, no such arid catalogue is required. The *assessment of the land* is described elsewhere (see Chap. X). From the financial standpoint, it is important to note that the margin for growth is rapidly shrinking: indeed, if there is to be any protracted fall in world-prices, the proceeds of the rental (or tax) on land may recede instead of advance. The *three great commercial*

departments have had chapters of their own; they are designed to be national and self-supporting assets rather than contributors to the treasury. In a lesser degree this is true of the *Forests*, though in them India possesses a magnificent property (about 250,000 square miles in area) which up to two generations ago was running to waste, but is now capable—although at the cost of much capital outlay—of yielding a progressive return from its varied wealth of timbers and its many valuable by-products. To the subjects of *Excise*, *Opium*, and *Salt* a later chapter (XV) is being devoted. Financially, the tendency of all three is downward. The excise on intoxicants and drugs, the revenue from which has reached the limits consistent with restrictive policy, is now threatened by the Nationalist programme of prohibition. The opium revenue, under an international humanitarian policy, is hastening to its doom. Salt, up to the early years of this century, produced a revenue second only to that from the land; and so simple was the collection and so easy the procedure for varying the rate that it was long regarded as a potential reserve. Although the duty since 1924 has been only just over one farthing per pound, yet popular sentiment at the moment, stimulated by Mr. Gandhi's dramatic protest, is hostile to the tax as being a levy on a prime necessity of the poor. *Stamps* is a formidable, but fluctuating, figure, reflecting the activity or otherwise of commercial transactions and of litigation. *Interest*, as an item of revenue, has no relation to the public debt. In the central budget, it is largely composed of the amount by which the Gold Standard Reserve (kept in sterling securities) exceeds £40 millions, the conventional level of safety; the balance being mostly interest on advances and on the temporary investment of surplus funds in the Home or Indian treasuries. *Currency* again, as a source of revenue, means the interest on securities

held against the note circulation; and the *Mint* does a certain amount of remunerative work apart from the Indian coinage.

If evidence is sought of the transition in India from medieval to modern finance, it is found in the *Taxation on Incomes*. For many years after its first introduction, the income-tax had to face the determined hostility of Indian tradition to direct taxation in any form; and every device of oriental ingenuity was exercised in evading it. The assessment was consequently haphazard, and the proceeds inadequate: fifty years ago, the total yield was under £100,000; even in 1914 it had with difficulty risen to £2 millions. By the steady development of scientific methods of assessment, and by the employment of honest and competent officials, all this has been changed, and the tax grows increasingly efficient. Its rates vary from roughly 3 per cent. on a minimum income of £150 to 13½ per cent. on a minimum income of £7,500; while a super-tax is levied on a sliding scale upon individuals with an income of over £3,750 and upon joint Hindu families with an income of over £5,625, and at 6¼ per cent. on companies with a taxable income of over £3,750. A cardinal feature of the system, however, is that these taxes are not levied on incomes derived from agriculture, which in theory contribute their quota to the State through the land revenue.

Finally, we come to *Customs*, another striking example of economic change. From 1894 the tariff consisted of a general *ad valorem* duty of 5 per cent., with certain exceptions and exemptions, and was imposed entirely for revenue purposes. One of the exceptions was cotton goods, on which an import rate of 3½ per cent. was counterbalanced by a 3½ per cent. excise on similar products manufactured in India. This excise was a special measure of protection in the interests of Lancashire, which rankled,

with growing bitterness, in the Indian mind until it was finally abolished in 1926. Under the stress of war conditions, the general tariff of 5 per cent. was raised to 10 per cent., and in the post-war slump to 11 per cent. With the reforms of 1919, a new influence came into play. Ever since a Nationalist programme existed, the demand for fiscal autonomy had been one of its strongest planks. Resenting, to use their own words, India's role as a hewer of wood and drawer of water for the manufacturing nations of the West, patriotic Indians had unceasingly urged that they should be allowed to protect their own industries against foreign competition, and released from selfish interference by the House of Commons. An outstanding feature of the Charter of 1919 was the pledge concomitantly given, though not embodied in the law, that this liberty should be inherent in the new constitution. That pledge has been honoured, and the Indian legislature has taken full advantage of the position. The tariff schedule is now divided into several sections. At one extreme are the free entries, comprising grain (other than wheat), a variety of raw materials, agricultural and dairying implements, books, and gold. At the other extreme is the section definitely labelled protective, confined at present to iron and steel products, paper, cotton piece goods, and matches. But between these two extremities is a multitude of rates. They range, to cite a few examples from the tariff schedule in force after March 1931, from 2½ per cent. on aeroplanes, 10 per cent. on railway materials, 15 per cent. on spirits, tea, glass, leather, and yarns, 25 per cent. on rough sugar, 30 per cent. on watches and manufactured silk, to 75 per cent. on cigars. Theoretically, the schedule is a compromise between a revenue tariff, a punitive tariff on luxuries, and a protective tariff. To the last element—and to it alone—

the principle of preference has been extended, in the teeth of strong opposition from the advanced Nationalists; iron and steel products and piece goods being given a substantial advantage if of British manufacture. The broader issue of Imperial preference has been carefully avoided.

Inasmuch as the accepted goal is 'rapid industrialization by means of discriminating protection', a Tariff Board was set up in 1923 as the agency of any such discrimination. It dealt at once with the claims of the great Tata enterprise in iron and steel, with the result that that industry is now heavily protected, the tariff shelter being supplemented by direct subsidies for some years after its introduction, as well as by administrative action. A number of other claims have been investigated; but the most urgent demand of recent years came from the Bombay cotton mills, when they were threatened in the beginning of 1930 with financial catastrophe. Despite an earnest representation from the British Government, the Indian legislature raised the general duty on cotton goods from 11 to 15 per cent., and added a further protective duty of 5 per cent. on all cotton piece goods imported from elsewhere than the United Kingdom; in both cases a minimum of 3½ annas per lb. being applied to plain grey goods. In this manner the principle of fiscal autonomy was conclusively asserted.

Before leaving the subject of the public revenues, we ought to remind ourselves of the vast congeries of local authorities which also raise money from the lieges and employ it in their service. Rural boards, of various grades and under various names, cover the whole of India, to the number of about 5,500, and with an income of over £12 millions, obtained largely from cesses on the land. An urban population of some 19 million souls is cared for by about 780 municipal bodies, which enjoy an aggregate

income (in 1928–9) of £13 millions. Their methods of local taxation are manifold, including octroi and terminal taxes, rates on property, trades, wheels, water, and so forth. Finally, there are port trusts for the six great harbours of India, with an income between them of £6½ millions, and the power of raising loans, which rank in the Indian market high after government securities.

The ground is now clear for examining the whole question of taxation, and the frequent complaint that India, in relation to the poverty of her people, is a heavily taxed land. In estimating the burden, we obviously have no concern with payments for services rendered by the railways, the post office, or the irrigation department. Nor, according to competent authority, should we reckon the revenue derived from the land, being rent in exactly the same way as what is paid for the right to occupy a house or to fish a river. In regard to the cost of judicial stamps or the fees for registering documents, parallel arguments might be used. But, not to press the analogy too far, we may allow our calculation to embrace the revenue obtained from customs, taxes on income, salt, excise, stamps, and registration. This amounts to £81 millions. It would be a generous assumption to treat the whole of this as being paid by the inhabitants of British India; for it is clear that, in the cases of customs and salt at least, a substantial proportion of the burden must fall on the subjects of the Indian States. If, however, we make the assumption as a set-off to any margin of error, the incidence of taxation works out at 6*s.* 7*d.* per head (or 1·60¼ dollar). Had we brought in the land revenue, this would have been 2*s.* higher. Small though the figure appears, the test of its severity or the reverse is to relate it to the average income of the resident in British India. Here we are plunged at once into a maze of statistics and

controversy which, in the space now available, it is impossible even to summarize. Suffice it to say that responsible opinion seems to be settling down to 100 rupees (£7 10*s.* or 36·50 dollars) as a rough but reasonable approximation to the *per capita* income of the country. This being so, the incidence of taxation on the individual income averages 4½ per cent.; or, if we include local rural and urban rates, very close upon 5 per cent. It is worth our while to compare this with the corresponding figures for the United States of America and Great Britain. According to official statistics for 1928 and 1929, the incidence of federal and state taxation in the United States is 6 7 per cent. of the income per head; but this leaves out of account the heavy local taxation. For the same period, the United Kingdom figure is 20·6 per cent. exclusive of local rates. In these circumstances the onus of proving that Indian taxation is a crushing load rests on those who assert it.

Moving from the domestic to the international aspect of Indian finance, we have now to analyse the public debt, both in regard to its demands on the taxpayer and as a gauge of the country's credit. In 1840 the total debt of India was £30 millions. In 1857 it had risen to £52 millions, when the Mutiny came and added another £42 millions to it in four years. After that, the chief causes for borrowing were frontier troubles beyond the capacity of the ordinary revenues, and periodical famines at home. When the great famine of 1877 had been financed, the debt had mounted to £146½ millions. But it was also, for the next half-century, a time of strenuous activity in capital expenditure, on railways, irrigation, famine preventive measures, and agricultural and municipal loans through special provincial funds. During the series of prosperous years before the Great War, the debt was

kept in check by substantial revenue surpluses, and by what was in practice a redemption scheme, though it appeared in the accounts as famine insurance. With the war, and in the difficult years which followed it, heavy budget deficits had to be covered by borrowing; and India's war-gift of £100 millions to the British Exchequer was in effect an addition to the public debt. The old policy of steadily replacing unremunerative by remunerative debt fell of necessity into abeyance; but it was happily revived in 1924 by the establishment of a regular sinking-fund, to which the exchequer contributes annually a sum of 40 million rupees (£3,000,000), plus one-eightieth of any excess in the outstanding debt on the previous 31st of March as compared with the debt outstanding on the 31st of March 1923.

In the following table are shown, not only the public debt proper, but all the other similar liabilities of the Central Government, as they stood on the 31st of March 1931; the figures being given for convenience in sterling, although more than half the total liability is redeemable in rupees:

Interest-bearing obligations of the Government of India

	£ mill.
(1) In India:	
Public debt (including short-term Treasury Bills)	351·4
Other obligations (including savings bank, cash certificates, provident funds, depreciation and reserve funds)	131·2
Total in India	482·6
(2) In England:	
Loans	316·0
Other items (including capital value of liabilities undergoing redemption by way of 'terminable railway annuities')	71·8
Total in England	387·8
Total interest-bearing obligations	870·4

Certain of the provinces have also raised loans, roughly

£12 millions, in the open market under their new powers of independent borrowing.

The ordinary calculations of the incidence of a national debt upon the individual citizen, and of the burden he carries as his share of the interest and sinking-fund charges, would be beside the point in India; for, as we have seen, the major portion of those charges is included in the working expenses of the commercial departments of the State. India's debt, in fact, has been for the most part incurred in building up and developing public utility enterprises of a productive nature, the profits on which have not only covered the full interest charges, but in addition have yielded a substantial benefit to the State. In particular, the State railways of India constitute one of the largest enterprises of the world, and the money which has been raised for them may reasonably be regarded as in effect the capital of a great business rather than as national debt in the ordinary sense—a business moreover which in this case has returned, during the last five years, no less than £21 millions to the general revenues in relief of the general taxpayer. One more table may be permissible, to show how far the liability of the Central Government is covered by interest-yielding assets. The figures (converted into sterling at 1*s.* 6*d.* per rupee) are again as at the 31st of March 1931:—

	£ mill.
Capital advanced to railways	559·0
Capital advanced to other commercial departments	17·5
Capital advanced to provinces (for irrigation works past and present, loans to local bodies, and advances to agriculturists, &c.)	111·8
Capital advanced to Indian States and other interest-bearing loans	14·7
Total interest-bearing assets	703·0

being the equivalent of 80 per cent. of the obligations enumerated above.

What, it is often asked, was the necessity for India to borrow so much of its capital in England, instead of utilizing the savings of its own people? and what advantage does the foreign investor obtain over the holder of rupee stock? An answer to the first question would require an essay, for which the space is not available, on the hoarding habits of the land. As confidence in a stable government matures, the position is growing steadily better; but in the past it was impossible, year in and year out, to rely on the Indian market for more than a fraction of the Government's capital requirements; the Indian speculator had little use for government paper, and the investor found a better yield in real estate. Even to-day the *locale* of a new loan has, in the interests of the taxpayer, to be determined by the conditions prevailing in the London and in the Indian market at the time of issue, and the best expert advice is always taken with a view to securing that the money is obtained on the lowest terms possible. To the second question the answer is that, broadly speaking, there is a close correspondence between the yield of the sterling and of the rupee loans. For example, in May 1930 there was an issue in London of 6 per cent. Sterling Bonds, 1933–5, the price of issue being 99; in July–August 1930 there was an issue in India of 6 per cent. Rupee Bonds, 1933–6, at par; and in October 1930 an issue was made in London of 6 per cent. Sterling Bonds, 1935–7, likewise at par. Sometimes the buyer of rupee stocks gets a better return on his money than the buyer of sterling paper, and sometimes vice versa; there is no substance in the charge that India pays too much for its sterling obligations.

To conclude; in all the broad field of Indian finance, there are no greater desiderata than a stable exchange and a popular system of banking. In both these directions

a definite advance stands to the credit of the British administration. The demonetization of silver enabled Indian trade to move confidently into the markets of the world; and though opinion will always differ, and interests clash, on any conceivable ratio of a gold exchange standard, the present equivalence of the rupee in practice to 1*s.* 6*d.* gold has lasted so long, and has been maintained with such ease, that any attempt to alter it on theoretical grounds must be viewed with grave apprehension. There is no 'natural' level for the rupee as the unit of a managed currency; the test of the propriety of any given rate is its acceptability in international trade. The need of attracting the stagnant wealth of the country into fertile circulation is fortunately a less controversial matter than the gold parity of the rupee, and no political party demurs to the courageous policy of expansion that has been undertaken, with the backing of the Government, by the Imperial Bank of India.

Note.—The conversion in this chapter is at the current rate of 13·33 rupees to the £.

Chapter XV

DRINK, OPIUM, AND SALT

By B. FOLEY, C.S.I., M.A.

[Mr. Foley during a period of thirty-five years in the Indian Civil Service has had considerable experience of the problems of indirect taxation. He was Collector of Customs, Calcutta, and later Commissioner of Excise and Salt. From 1924 to 1928 he was Member of the Board of Revenue, Bihar.]

DRINK

THE most usual form in which alcohol is consumed by Indians is country spirit or arrack, distilled from the flower of a very common tree (*bassia latifolia*), or from sugar-cane; the second is toddy, the fermented juice of the palm-tree; the third is liquor brewed from grain, which is the chief drink of the aborigines. The ease with which illicit supplies can be manufactured or obtained from these sources in most parts of India must be recognized as a factor of predominant importance in the matter of drink control. Malt liquor from a few breweries, and rum, etc., manufactured in a few distilleries, are also subject to excise. Imported wines, beers, and spirits pay duty at the custom-houses.

India on the whole is essentially a temperate country. It is true that there is intemperance in some industrial centres and among certain of the aborigines, but, speaking generally, the drinking evils of the West have no counterpart in India. A large proportion of the population, estimated at one-fourth in Madras and one-third in Bihar, are abstainers; but the majority are not, and some religious sects enjoin a ceremonial use of alcohol. The Muhammadans on the whole observe the injunctions of the Prophet and abstain, though, oddly enough, a very large propor-

tion of the distilleries and country spirit shops are held by Muhammadans.

It is sometimes said that alcohol was unknown before the advent of the British and was introduced by them, but there is abundant evidence that drinking was prevalent from the most ancient times. In the early days of the East India Company intemperance was so rife that it was actually with the object of suppressing it that in 1790 the British made their first attempt to control the consumption of drink. As then stated, 'excess had become prevalent among many of the lower orders owing to the very inconsiderable prices at which spirits and drugs were manufactured and sold'. Under Muslim rule the usual system was to settle an area either with the highest bidder or with a local landholder, who was left to open as many shops as he liked. The British first limited the number of shops, and then introduced what is known as the 'outstill system', whereby a certain number of small stills were permitted in each district, and each still, with the right of manufacture and sale, was separately settled annually by auction. This system is retained at the present day in backward and inaccessible areas; but its disadvantages are that consumption cannot be ascertained, and the quality, quantity, strength, and price of the liquor manufactured and sold cannot be controlled. Gradually better methods of administration were introduced.

The policy for the last twenty-five years has been to substitute what is known as the 'contract distillery system'. To a large up-to-date distillery in the hands of responsible persons, where supervision ensures the purity of the product, is granted the right of supplying liquor wholesale at a fixed price per gallon and at certain fixed strengths to a certain number of shops over a large area: these shops are settled annually with separate vendors, who are

required to take the whole of their stock from the distillery, to pay duty on each consignment as it is removed, and to sell at certain strengths and prices. Of late years a further refinement in some provinces has been the introduction of a sliding scale, whereby the vendor's share of profit diminishes and that of Government increases, if consumption rises. Provided the vendors do not obtain illicit spirit from elsewhere, the result of the contract distillery system is a vast decrease in consumption as compared with the outstill system, the abolition of which may be regarded as a temperance measure on a very large scale. The actual consumption can be ascertained accurately, and every gallon of liquor issued pays duty: the rate of duty is fixed with the object of raising the retail price to the highest pitch compatible with the suppression of illicit distillation, so far as that can be secured without prohibitively costly staffs and undue interference with individual liberty and the privacy of the home.

The recognized policy of the Indian Government before the reforms of 1919 was to obtain the maximum revenue from the minimum consumption, to provide for the needs of the moderate drinkers while checking excess, to raise taxation as high as possible without causing illicit distillation, to reduce the number of shops and the hours for sale, and to ascertain and follow reasonable public opinion as regards the number and location of shops. As regards aborigines, the aim was to prevent the substitution of distilled for fermented liquor, but to avoid harsh measures in the case of the latter.

It is often stated that, inasmuch as the revenue from excise has greatly increased, consumption must have increased in proportion. Improved excise administration, however, in India, necessarily connotes increased revenue, since chaotic and lax methods have been replaced by

scientific systems. In view of the increase in prosperity and wages, a large increase in consumption might indeed have been expected, but as a matter of fact the opposite has been the case. In 1912, the issues of country spirit from distilleries were nearly 10½ million London-proof gallons; in 1923 they were only 6½ millions. The consumption of country spirit per 100 of the population was in 1884 nearly 5 gallons; after twenty years it was a little over 4, and after another twenty years under 3 gallons. As regards facilities for drinking, the number of country spirit shops was reduced from 24,000 in 1912 to 16,000 in 1924, the average area served by each shop being extended from 44 to 67 square miles, while shops for fermented liquor decreased from 32,000 to 22,000. The area under outstills was reduced from 135,000 to 80,000 square miles during the same period. In 1912, the taxation on country spirit varied between 3 and 9 rupees per proof gallon; in 1923 between 8 and 16 rupees. At the same time there was a large rise in retail prices. There was also a decrease of 330,000 proof gallons of imported liquor, the duty on which had been raised in proportion. These figures would be valueless, had there been at the same time an increase in the consumption of illicit liquor; but there is no doubt that up to 1921 efficient organization was reducing illicit manufacture, as well as licit consumption.

Since the reforms of 1919, excise has been controlled in the provinces by Indian Ministers, and there has been a change in the general policy adopted. Shops have been so seriously reduced in number and prices raised to such an extent that illicit distillation has greatly increased: on the other hand, there is a tendency to reduce preventive establishments. Several of the provincial legislatures have passed resolutions in favour of prohibition, and two have actually adopted prohibition as their 'ultimate goal'. The

difficulties inherent in the enforcement of prohibition in any country are accentuated in the case of India. To be effective, it would have to be adopted by the whole of the country. No one province could enforce it, unless not only adjacent provinces, but also adjacent Indian States adopted it too. It would be impracticable to suppress the illicit distillation that would ensue, as the means and material for illicit manufacture exist almost everywhere.

In this connexion the example of Bombay is instructive. Here a system of rationing spirit shops was introduced in 1923, a monthly reduction of 10 per cent. being made in Bombay City and of 5 per cent. elsewhere. The result was that the shopkeepers asked too high prices and a large proportion of the rationed liquor remained unsold. Notwithstanding this, the shops fetched higher prices the next year, indicating that the vendors were selling illicit liquor under cover of their licences. Indeed illicit distillation —of spirit more potent than the licit—increased enormously; there was also extensive smuggling from Indian States. The preventive establishment, which had been reduced, experienced hostility from the public. The consumption of foreign liquor increased, also of toddy (which was used as a base of distillation), of hemp drugs, and of cocaine, while it was found that denatured spirit was being converted into drink. The general result was an increase in drunkenness and crime.

Another example is to be found in the Punjab. Here the duty was raised and the number of shops reduced. It was ascertained, however, in 1924 that the difference in price between licit and illicit liquor was so great that illicit distillation was being carried on as a commercial undertaking and wealthy landholders were taking part in it. In consequence it became necessary during 1925 to make a considerable addition to the excise preventive staff, while

in 1926 the duty was lowered and 143 more shops were opened in places notorious for the illicit sale of liquor. There is unfortunately abundant evidence also in the United Provinces, Madras, and the Central Provinces of an alarming increase in illicit practices.

These results suggest the need for caution on the part of social reformers who are seeking to change the habits of those classes in India which have been accustomed to the use of alcohol.

OPIUM

Opium is now manufactured by the Government of India only at Ghazipur, from the white-flowered variety of poppy grown in the neighbouring districts of the United Provinces, the cultivation of the poppy being prohibited practically everywhere else in British India. Opium is also produced in certain Indian States in Central India, where it is known as Malwa opium: its import into British India is controlled. It was Malwa opium that was originally exported from India to China and the Far East, first by the Arabs, then by the Portuguese, then by the Dutch.

The Mogul Government had farmed out the right to produce opium, but in 1773 Warren Hastings, finding that this system gave rise to many abuses, substituted a Government monopoly of manufacture and export, his policy being to prevent excessive consumption in the country, without regard to the effect on consumers elsewhere. A subsequent attempt by the East India Company to limit the use to medical purposes was abandoned as impracticable. The chief customer for the opium exported was China; but it is to be remembered that the consumption of opium was common in China centuries before opium was exported from India; it was largely

produced in three provinces of the west and two of the north west, into which Indian opium never penetrated. The war of 1839 was due to other causes besides the Chinese seizure of opium: after the treaty of 1858 it was the Chinese Government which, not under constraint, admitted opium as a legal article of import.[1] As a matter of fact the amount of opium exported from India to China was only a fraction of the amount produced in China. In 1907 there were 51,000 chests of opium exported from India to China, while about the same time an English expert estimated the amount produced in China at 360,000 chests, and a Chinese expert the amount annually consumed in China at 600,000 chests.

In 1907 the Government of India agreed to reduce the amount of opium exported to China by one-tenth each year, provided it was found that there was a similar decrease in the production in China and in the imports from Persia and Turkey; and they closed Patna in Bihar, one of their two factories. By 1910 it was clear that the Chinese were carrying out, in a large measure at least, their part of the agreement, and in 1913 it was decided to discontinue further exports to China. The Government of India thus sacrificed an annual revenue of at least three million pounds. After 1916, however, the Chinese prohibition slackened, the War Lords found opium a profitable source of revenue, and the violence that had been employed to suppress the cultivation of the poppy was employed to encourage it. At present the poppy is grown in many provinces of China, and China is producing very much more opium than any other country in the world. The reduction of Indian exports and revenue has thus been accompanied by larger trade for Chinese producers and merchants, and largely increased imports into China.

[1] See Sir John Strachey, *India, its Administration and Progress*. Chapter on Opium. Fourth Edition, 1911.

As regards other countries of the Far East the Government of India limited exports of opium, to supplement and protect as far as possible their agreement with China; at the same time they subjected these exports to restraining agreements with the countries concerned. In 1923 they introduced a certificate procedure, recommended by the League of Nations, whereby all exports of opium must be covered by certificates by the Government of the importing country that its consignment is approved and is required for legitimate purposes. In 1925 they stopped the system of auctioning opium for export and undertook the export direct. Their policy for many years has been to export to Governments only. In 1926, finally, they took the drastic step of reducing exports to Far Eastern countries, for purposes other than medical and scientific, by 10 per cent. annually, so as to extinguish exports altogether by December 1935: effect has since been given to this decision at great financial sacrifice.

No opium is exported to America or to any European country except Great Britain. Exports to Great Britain are limited to medicinal requirements, and are strictly controlled by the British Government under the Dangerous Drugs Act.

In 1901 the area under poppy cultivation in British India in connexion with the two factories at Ghazipur and Patna was 586,400 acres: this was very greatly diminished when the poppy was suppressed in the Bihar districts on the closing of the Patna factory in 1908. In 1920 the area had fallen to 154,621 acres, in 1930 to 36,613. A chest of opium weighs about 140 lb. In 1920 the number of chests exported was 10,997; in 1929 it was 6,104. There has never been any export of opium prepared for smoking.

No heroin is manufactured in India. It was mainly owing to pressure from the Government of India that

cocaine and the drugs which are manufactured fro· opium were included in the convention drawn up by th Hague Conference in 1911, enforcing provisions lon before observed in India; and since then the Government of India has been only too glad to adopt and enforce all practicable suggestions of control. In 1930 a Dangerous Drugs Act was passed, which increased the control of the Government of India over certain operations, and augmented and rendered uniform the penalties. India was one of the countries which accepted the latest measure at Geneva in July 1931, an international convention for the limitation of the manufacture of narcotic drugs. India has therefore taken a prominent part in helping to combat this particular scourge.

As regards the consumption of opium in India itself, excluding Burma, a clear distinction must be drawn between opium-eating and opium-smoking. The latter is generally regarded as a disreputable vice to be suppressed; the former is not. Many most respectable Indians, who would be horrified at the idea of drinking alcohol in any form, consume a little opium as part of their regular diet: in malarious tracts it is looked on as a prophylactic, in others as a household remedy for minor ailments. The question was examined in 1893 by a Royal Commission which stated its conclusions as follows:

'The opium habit as a vice scarcely exists in India: opium is extensively used for non-medical and quasi-medical purposes, in some cases with benefit and for the most part without injurious consequences: the non-medical uses are so interwoven with the medical uses . . . that it would not be practicable to draw a distinction between them, and it is not necessary that the growth of the poppy and manufacture and sale of opium in British India should be prohibited except for medical purposes.'

Eighteen years later the question was re-examined by

Lord Hardinge's Government, which confirmed the Royal Commission's conclusions; and they were quoted with approval by Lord Reading's Government in 1921.

Since 1921 opium administration in the provinces has been in the hands of Indian Ministers, but the Central Government has assisted in all restrictive measures. In 1926 it suggested an inquiry into certain 'opium black spots' where consumption was above the average. In a conference convened on this subject in 1930, it was held that measures were required in Calcutta and in parts of Assam, and that Orissa and one district of the Punjab required further investigation; drastic measures to that end have since been taken. In 1927 Government also appointed a committee of inquiry with a view to control Malwa opium more strictly. On receipt of this report in 1930 it was decided to purchase at very considerable expense all old stocks of opium in the various Indian States and to take measures to reduce poppy cultivation in those States.

As regards opium-smoking, the amount consumed is very small and under strict control. The sale of opium prepared for smoking has long been prohibited everywhere, and no one but an individual smoker may prepare it. Smoking in company by three or four persons has also been forbidden in certain areas. Lately Assam has prohibited opium-smoking altogether. In Burma, where smoking, not eating, is prevalent, stringent measures for the ultimate extinction of opium-smoking have been adopted.

As regards consumption in British India, this decreased between 1911 and 1929 by approximately 470,000 lb. The United Provinces show a decrease of nearly two-thirds; and Bombay, Burma, the Central Provinces and Assam of one half or more. The number of chests of opium issued for consumption in India dropped from 8,638 in 1920 to

5,041 in 1929. The consumption per head per annum has also largely decreased of late years.

SALT

A tax on salt is not peculiar to India, since five other countries, including France, the Netherlands, and Brazil, levy such a duty, while in seven others, including Italy, Spain, Greece, and Japan, salt is a Government monopoly. In China, where the conditions are in many respects analogous to those in India, it is the principal source of Government revenue. Akbar (1555–1605) alone made an unsuccessful attempt to dispense with the taxation of salt. Before the advent of the British there were not only local cesses, but also transit dues levied progressively at customs barriers. Inland, where local salt was unobtainable, the price, owing to these duties and the high cost of transportation in the absence of railways and good roads, was sometimes prodigious.

In 1780 Warren Hastings established a monopoly of manufacture and wholesale vend for Bengal, Bihar, and Orissa. The system was in 1845 attacked on the ground that the salt was bad and very dear and the taxation high, with the result that the monopoly was relaxed in that year and abolished in 1862. In consequence the inferior local article was gradually superseded by imported white salt. The territory acquired to the north-west in 1802 was supplied with salt from the Punjab, from Rajputana, or from local salt-earths, which was taxed, with other articles liable to customs duty, at various inland custom-houses. In 1834 these custom-houses were abolished; all articles except salt and three other items were exempted from duty; and a customs line was established round British Indian territory, inside which the manufacture of salt was prohibited. This line was much extended after the

acquisition of the Punjab, and it was subsequently pushed out farther. In 1867 it stretched for 2,472 miles and was guarded by 13,000 men. Taxation within the line was higher than in Bombay or Madras, but the salt supplied was cheaper and far superior to that which had previously been obtainable. The Government had taken over the rock-salt mines in the Punjab and had acquired the valuable Sambhar Salt Lake, and other salt sources in Rajputana. The line was, however, a hindrance to trade. The duties on the other articles taxable were finally abrogated by 1879, when the customs line was abolished, the salt tax alone remaining to represent the system of inland taxation which formerly obtained.

The policy adopted was to collect the duty at the place of manufacture or the port of entry, and to permit the freest possible competition among the various kinds of salt. For this reason the duty on the sea-salt works in Bombay and Madras was raised, and that elsewhere lowered, and in 1882 the tax was equalized at 2 rupees per unit of $82\frac{2}{7}$ lb. The rate has varied from time to time, between $2\frac{1}{2}$ rupees and 1 rupee. The present rate of $1\frac{1}{4}$ rupee was fixed in 1924. The approximate total revenue from salt in 1928–9 was about £5,700,000 or 27,740,000 dollars. Of the salt consumed in India about 35 per cent. is manufactured by or for Government; about 35 per cent. is produced by private manufacture; and about 30 per cent. is imported. As a uniform duty has hitherto been imposed, it has been a matter of indifference from a revenue point of view whether foreign or Indian salt is consumed. Foreign salt is mostly utilized in Bengal and in Burma. In Bengal the inhabitants are unable to produce good salt and dislike the inferior Bombay and Madras salt. In 1873, of the imported salt three-fourths came from the United Kingdom, and in 1905 the United Kingdom supplied four times

as much as its next competitor, Aden, where the merchants are mostly Indian. By 1929, however, only about one-fifth of the foreign salt came from the United Kingdom and about two-fifths from Aden.

During the war there was considerable shortage of salt and the price, both of foreign and Indian salt, rose enormously, India being unable to supply the deficiency in imported salt. In 1926 the Indian Taxation Enquiry Committee recommended that the question, whether India might not become entirely self-supporting in the matter of her salt supplies, should be referred to the Tariff Board, then lately constituted. Ultimately, in September 1930, the Tariff Board recommended that Bengal should be supplied more largely from certain Indian sources and, by a reduction of railway freight, from the Punjab, and also that control of imported salt should be assumed. In March 1931 the Legislative Assembly resolved by 53 votes to 18, the Bengal members all opposing, that a duty of $4\frac{1}{2}$ annas (about 5*d.* or 10 cents) per $82\frac{2}{7}$ lb. should be levied on all foreign salt imported. For the purpose of this duty Aden is considered a part of India.

In March 1930, Mr. Gandhi, to inaugurate the 'civil disobedience' campaign, marched from Ahmadabad to the sea to manufacture some salt in defiance of the Salt Act. Early in 1931 the Government of India announced that, in view of the financial condition of the country, they were unable to make substantial modifications in the Salt Acts, but were prepared to permit local residents, in villages immediately adjoining areas where salt can be made, to collect and make salt for domestic consumption or sale within such villages, but not for sale or trading with individuals living outside them As most of the salt in these areas is very inferior, this concession will make no appre-

ciable difference to the revenue. It has always been debatable whether it was worth while in these tracts to maintain a largely ineffective preventive staff, and in times of scarcity the law was often relaxed. In this connexion the words of Sir Richard Dane, a high authority on salt administration, in a lecture in May 1924 are apposite:—

'A salt tax, so far as it represents the appropriation of a share of the profit of the producer, the transporter and the vendor, while the prices of salt are kept low by an efficient administration, is an excellent tax in an Oriental country. When poor people are prosecuted for making coarse and inferior salt for their own consumption, a salt tax is oppressive. . . . If an adequate supply of good salt at reasonable prices can be assured, I think myself that the penal provisions of the law may be radically altered and that the manufacture of inferior salt for domestic consumption need no longer be treated as a criminal offence.'

Thus one ground of attack on the salt administration has been removed: others remain.

One is that salt, a necessity of life, ought not to be taxed. The opinion of economists is divided on this subject, but the school of Adam Smith assumed that good cheap salt is everywhere obtainable. This is not the case in India, where the Government have made themselves responsible for the supply of good salt at a reasonable price throughout the country. If their control were removed, there is little doubt that in parts of the country only inferior salt at much enhanced prices would be procurable. Government are able to control the price, because in some areas the manufacture of salt is in their hands; in others Government have a right to buy it from private manufacturers.

Another objection is that the tax is extremely high as compared with the cost of production. This is true, but it is probably true of every salt tax that has ever been imposed. Salt costs little to make, but is so bulky to move that the cost of manufacture is insignificant compared

with the freight. Government make no profit whatever from manufacture and have indeed in the past occasionally manufactured at a loss, to ensure that salt is sold at the lowest possible price, recouping itself from the duty.

Lastly, it is alleged that the tax is burdensome to the poor. The average retail price in 1930 was $2\frac{1}{2}$ rupees (3*s.* 9*d.* at present or $91\frac{1}{4}$ cents) on $82\frac{2}{7}$ lb. so that the retail price per pound is a little over one half-penny, of which the duty is a little over one farthing. It is calculated that the tax paid annually per head of the population is 3 annas ($3\frac{3}{8}$*d.* or $6\frac{3}{4}$ cents). This is not felt by the cultivator, and were it remitted or reduced, the traders would obtain most of the benefit. That the tax is not appreciably felt by the consumer is shown by the fact that increases or decreases in the tax have had inconsiderable effect on consumption, and that in normal times there is very little illicit manufacture: if the tax were severely felt, salt would be produced illicitly on a considerable scale. That the tax is not too heavy is also shown by the fact that consumption per head of population has risen by fifty per cent. within fifty years. When the tax was considerably raised in 1923, an attempt to stir up an agitation met with little response from the masses of the population.

The conclusion seems to be that in the present condition of India the tax is more suitable than any other which could be imposed in its place. It is collected without difficulty and the cost of collection is not high; the cultivator has always paid it and pays it in such a way that he is not conscious of the burden; and it is the only contribution towards the revenue made by a very large portion of the population.

Chapter XVI

POPULATION, POVERTY, AND THE 'DRAIN'

By VERA ANSTEY, D.SC.(ECON.)

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WHO are 'the poor' in India? How do they live? What are the causes and the characteristic problems of poverty in India?

There is no objective criterion of 'poverty', but according to Western standards practically the whole of India's labouring classes can be classed as 'poor', in the sense that even in good times they earn little more than the bare necessities of life, and that if anything goes wrong they are liable immediately to sink below the subsistence level. A certain number of cultivators and skilled industrial workers earn enough to live a comfortable, if simple, life, but the great bulk of the labouring population undoubtedly leads a precarious, hand-to-mouth existence. In fact the extreme poverty of the peoples of India is undeniable and undenied.

How can this be reconciled with the well-known fact that India has always had, and still has, a large annual net import of gold and silver? (See Chap. XVII.) The explanation is to be found largely in the prevalent social practice of hoarding wealth in the form either of hidden stores of the precious metals, or of ornaments worn by the women, instead of investing in productive undertakings. In the past, the lack of security and of banking facilities

sufficed to account for this habit, but at the present day full advantage is not taken of existing facilities. This is mainly because of the position of Indian women: the Hindu woman, if widowed, is relegated permanently to an inferior social position, and inherits no wealth except that which she carries on her person. Hence much of the limited amount of capital which India does possess is sterilized, and thus fails to increase productivity. In addition, those who stored their wealth in the form of silver have recently seen their hoard reduced to a fraction of its former value by the catastrophic fall in the price of silver.

According to the census of 1921, the manual workers included a vast proportion of the whole population. As 90 per cent. of the total population is classed as 'rural', this implies that the great bulk of the labouring population still lives in a simple, primitive environment, although many industrial as well as agricultural workers live in the villages. In 1921 over 73 per cent. of the population depended upon the production of raw materials, 10·5 per cent. on industrial pursuits, and 7 per cent. on trade and transport.

The labouring population falls into three main classes: (i) the cultivators, who own or rent land, and with their dependants form over 55 per cent. of the total population; (ii) landless agriculturists, small retailers, and unskilled and casual labourers of all types (with whom are included beggars), who form almost 30 per cent. of the total population; and (iii) industrial workers, including plantation coolies, who form over 10 per cent. of the total population.

Unfortunately the detailed figures of the 1931 census are not yet available, but the preliminary returns reveal a startling and unprecedented increase;[1] i.e. from 319 to

[1] The first census was taken in 1872. See Table I in my *Economic Development of India* (1929), p. 515.

nearly 351·5 millions—an increase of over 32 millions, or 10·2 per cent. during the decade. It is difficult to believe that such a rapid increase could have taken place had not conditions of life been eased to some extent.

It can thus be said that the most typical Indian family consists of a cultivator and his dependants, who jointly cultivate, with or without hired assistance, a (usually small) holding.

To own or rent a holding capable of maintaining a family in independence and modest comfort is probably the prevalent economic ideal in India. Unfortunately this ideal is not so commonly attained as these figures might suggest. In the first place, the majority of the holdings are too small to yield enough, without help from other sources, to maintain a family, even at the prevailing frugal standard. It has actually been estimated that under Indian conditions an average of twenty to twenty-five acres of 'dry' land, or of five to seven acres of 'wet' land, suffices to support a family, but that, if holdings were rearranged on this basis, more than half the existing population would be displaced![1]

From this excessive pressure of population on the land arises the great evil of almost universal under-employment. Except at special seasons, there is insufficient work to employ those dependent upon these small holdings for more than (perhaps) one-third of their time. Very little relief is afforded by rural by-industries, largely because most of them are pursued by separate castes. One argument for the revival of hand-spinning is that it would be worth while, however small the return to labour expended, as it could be done in otherwise wasted time.

This widespread under-employment in agriculture partly accounts for the cultivators' lack of enterprise, as there is

[1] See B. G. Sapre, *Essentials of Indian Economics* (1927), p. 126.

little stimulus to adopt labour-saving methods. Pressure on the soil also accounts largely for the widespread indebtedness characteristic of Indian life.[1] If the rainfall is subnormal, or anything else goes wrong, the ryot is forced to resort to the moneylender. The other main causes of indebtedness are the customary extravagant expenditure on religious and social ceremonies, and upon litigation. Owing to the prevailing exorbitant rates of interest charged, and the size of the loans in relation to income, the borrower can seldom repay his debt, but remains permanently dependent upon the moneylender. The co-operative credit movement, initiated by the Government in 1904, provides the most hopeful remedy, but, notwithstanding a large absolute increase, has so far touched only a very small proportion of the population.

It is impossible to estimate the average or normal income of a typical cultivator, as it consists mainly of self-grown produce. An increase in prosperity can only be indirectly inferred from general indications of improved production, and circumstantial evidence of a higher standard of living.

There is a consensus of opinion that there has been some progress in these respects recently, and hence some, though a regrettably slight, improvement in the prosperity of the cultivators can be inferred.

The only available statistical evidence relates to the average income of the whole population, but details of the estimates made from time to time are hardly worth quoting, owing to the incomplete and unreliable nature of the data upon which they are based.[2] To institute (as has sometimes been done) a comparison between the alleged

[1] See M. L. Darling, *The Punjab Peasant in Prosperity and Debt* (1925).

[2] See *Report of the Indian Economic Enquiry Committee*, 1925, and my *Economic Development of India* (1929), p. 439.

average income per head in India and the average income per head in some Western country, merely exhibits gross credulity and complete ignorance of the bases of calculation and of the meaning (or lack of meaning) of the figures.

On the other hand, when similar methods of computation are adopted, a comparison of the estimates of income at different times in India may give some indication not so much of the absolute amount, but of the direction of change. Such estimates, whether computed by officials, European non-officials, or Indian economists,[1] all point to a distinct, if slight, increase in real income per head.

Estimates of agricultural produce available for consumption in India illustrate forcibly the extremely low standard of life that prevails. For instance, Mr. Lupton calculated in 1919–20 that, in an average season, the main foodstuffs available for human consumption in India worked out at 1·2 lb. per head per day.[2] This is just about on a par with the diet provided in jails, and on relief works during a famine. It probably provides sufficient cereal food to maintain tolerable efficiency, provided (as is not always the case) it is supplemented by other articles such as milk, vegetables, and fruit. But no allowance is made for inequality of distribution, and as it is certain that some sections of the population eat more, it follows that others must eat less.

The normal diet in India is extremely monotonous and consists primarily of cereals, being seriously deficient in fats and proteins. Diets vary in detail from locality to locality, and amongst different races and classes, and scientific experiments show that there is a close correlation

[1] Such as Shah and Khambatta, *Wealth and Taxable Capacity of India* (1924).

[2] See *Happy India*, chap. xiii; also D. L. Dubey, 'The Indian Food Problem', *Indian Journal of Economics*, July 1920, and Jan. 1921.

between differences in physique and in nutrition.[1] Malnutrition, whether due chiefly to dire poverty, bad farming, or custom, accounts largely for the poor physique, liability to disease, and relative inefficiency of large sections of the population.

The industrial worker, especially in large cities, is even worse off in these and certain other respects. He (or she) has to accustom himself (or herself) to novel and uncongenial surroundings, housing conditions are (on the whole) shocking and overcrowding extreme, and the condition of the women is particularly bad, as evidenced by the high maternal and infant mortality rates and the prevalence of tuberculosis.

More statistical material is available for landless workers than for the cultivators, incomes received in the form of wages being easier to assess; but in view of the incomplete records and the extremely wide variations in wage rates (between localities, industries, firms, and processes), generalizations can hardly be made. Moreover, wages seldom form the whole income, various concessions also being given in kind, while wage rates are no true index to earnings because of the extent of absenteeism.

Rural wage-earners, whether agricultural or industrial workers, form, perhaps, the most unfortunate class of India's 'poor'. They receive the smallest earnings, and have uncertain, intermittent employment. It is from these classes (and from the less successful cultivator families) that recruits are mainly obtained for the organized industries. It may here be noted that the workers in organized industries, who numbered 2·6 millions in 1921, still form only a minority of industrial workers in general, although of recent years there has been a considerable

[1] See *Report of the Royal Commission on Agriculture in India* (1928). Evidence, vol. i, pt. ii, p. 95.

transference from unorganized to organized industrial employment.

The Whitley Commission, which has recently reported on the whole problem of industrial labour in India,[1] emphasizes the fact that workers in the organized industries are pushed, not pulled to their new occupations. 'Very few industrial workers would remain in industry if they could secure sufficient food and clothing in the village.'[2] The Commission concludes that, on the whole, the adoption of such occupations is advantageous to the workers, when comparison is made with the conditions and earnings of the classes from which such workers are recruited, and that both earnings and the standard of life have definitely risen during the last thirty years. Conditions are best in the large factories, not so good in smaller and seasonal factories, and worst of all in unregulated factories and workshops. In the latter children from 5 years upwards are employed. In mines the legal age limit is 13, and it is 12 in establishments which come under the Factory Acts. Women and children are employed in unregulated workshops in most unhealthy and sometimes disgusting processes.

This short survey of the outstanding facts with regard to poverty in India presents a gloomy picture, which is somewhat relieved, however, by the fact that both direct and circumstantial evidence point to the conclusion that

[1] *Report of the Royal Commission on Labour in India*, Cmd. 3883; 1931. Attention may be called to the composition of this Commission, half of the members being Indian, including Mr. Srinivasa Sastri, Mr. K. Ahmed (ex-President of the Indian Seamen's Union), Mr. N. M. Joshi (a Labour representative in the Legislative Assembly), and Dewan Chaman Lal (founder of the all-India Trade Union Congress). The Report was unanimous, and its findings can neither be ignored nor accused of either anti-Indian or capitalistic bias. The appointment of such a Commission is indicative of the attitude and policy of the Government of India.

[2] Ibid., p. 41.

there has been some improvement during the last thirty years. Moreover, there is ample evidence of increased interest on the part of the Government, employers, and the general public in the welfare of the labouring classes. Labour legislation and welfare work have made marked progress. Attention may be specially called to the Factory Act of 1922; the prohibition of the underground work of women in mines (to be completely eliminated by 1939); the Workmen's Compensation Act of 1924; the Trade Unions Act of 1926; the Trade Disputes Act of 1929; the progress of the co-operation movement; and, finally, to the report of the Whitley Commission and the hope that its recommendations will be put into force.

The next question to be answered is—what are the fundamental causes of poverty in India?

Extreme nationalists claim that British rule and the policy of the Government of India have been and are the root causes of poverty in India, having been utilized primarily to exploit India's resources and trade, and that poverty has increased and still tends to increase under British rule. They argue that additional expenditure, including the cost of military operations and occupation and excessive expenditure upon civil administration, has been incurred, and has resulted in the annual payment by India of a 'tribute' in the form of the so-called 'Home Charges' —i.e. of sums payable in London by the Government of India from revenue raised in India. In addition—the nationalists argue—the British in India transmit savings and profits to England, instead of spending or investing them in India, and large sums have to be paid abroad by India on account of interest and profit on foreign capital privately invested in India. It is alleged that all these foreign payments arise out of British rule, and constitute what is called the 'Drain'—a process described as 'bleeding to death'.

The high level of governmental expenditure, the charge continues, has entailed burdensome taxation of even the poorest, especially by means of the land revenue and the salt tax.

The next allegation is that the whole trend of production and trade has been perverted and forced into channels profitable only to Great Britain. Indigenous manufactures and the export of high quality goods have been destroyed, the masses have been progressively forced back on to the land and driven to rely on the production of raw materials and foodstuffs which are exported in return for British (particularly Lancashire) manufactures. It is even said that famines have increased in severity. Indian interests and aspirations, it is alleged, have been entirely ignored; little or nothing has been done to remedy social evils or improve health, whilst education has been retarded.

Further, it is said that the construction of railways has aggravated the whole process, as well as entailing a direct financial loss in many years. Tariff policy has been directed to the same ends, and the currency and exchange policy has at certain times involved India in heavy losses.

This is a serious and lengthy indictment, and space forbids full discussion. But certain misconceptions and misrepresentations are involved which demand correction. It will then appear that although mistakes have been made —and what Government, indigenous or alien, has not made mistakes?—these alleged causal factors have been magnified out of all recognition, concealing the really fundamental issues. The Government of India has a very great deal on the credit side of its economic account, and, moreover, the policy pursued has progressively improved.

Before discussing the principal misconceptions, let it be admitted that India would have been better off if she could have provided from indigenous sources the capital,

military and naval defence, administrative and technical services actually provided from British sources. The question is—could she herself have provided anything like the equivalent, and if not, could she, without the British connexion, have secured capital and services more cheaply, or as cheaply?

Few nationalists, even, would maintain that she herself could have supplied the necessary capital. Capital is notoriously scarce in India in spite of the hoardings, and the British connexion undeniably enabled her to borrow more cheaply than she could otherwise have done.

It is also certain that, at the time, India could not herself have provided equally good technical and administrative services. Even Indian capitalists have employed foreign experts, as in the case of Tata Sons, Ltd., who obtained technicians from Germany and the United States.

It is clear that India could not have provided the equivalent from her own resources, and hence that the total expenditure under these heads ought not to be debited to Great Britain, whilst in justice the economic gains from British rule (to be indicated later) should be balanced against any net unnecessary expenditure incurred.

Let us now consider the principal misconceptions. In the first place the 'richness of the country' has been exaggerated. India has great resources but also marked defects, the most obvious being the nature of the rainfall, and the bad distribution of the sources of industrial power. The efficiency of the population is undoubtedly impaired by the climate and the prevalence of endemic and epidemic diseases, whilst the traditional social structure and customs tend to decrease mobility and economic effectiveness in many ways.

A comparison is sometimes drawn between the eco-

nomic potentialities of India and the United States, with special reference to self-sufficiency and the size of the inland market, but India's natural resources are unquestionably inferior, whilst the density of population is almost six times as great. The United States should be the first country to recognize the difficulty of profitably employing an immense population of peasants of the Indian type, and her immigration laws imply that in her own case she has not failed to do so.

There are small grounds for the assertion that India used to be the richest, but has become the poorest country in the world, if 'rich' and 'poor' are applied not to the fortunate few, but to the less fortunate many.[1] All extant evidence suggests that the masses have always had a hard struggle for existence and that famine has always been a serious problem. In olden times it would have been quite impossible to support a population of the present dimensions.

Moreover, the comparison should, in fairness, only be made with conditions just before the introduction of British rule. 'The identity of the phenomenon' (i.e. of the poverty of the masses) 'to-day and in the time of the Moguls is a sufficient answer to those Indians who, conscious of the contrast between India and modern Europe, would attribute all that is amiss in India to British rule.'[2]

To allege that the evil effects of famine have increased is to evince gross ignorance of the experience of the last thirty years in India. All through the nineteenth century the failure of the monsoon entailed great loss and suffering, but the construction of railways and of irrigation works,

[1] Sir Richard Temple, *India in 1880*, pp. 89, 92.

[2] Sir Basil Blackett, 'The Economic Progress of India', *Journal of the Royal Society of Arts*, 31 January 1930, p. 314. W. H. Moreland, *India at the Death of Akbar* (1920) and *From Akbar to Aurangzeb* (1923).

together with the gradual perfection of famine relief administration, entirely transformed the problem. Since the beginning of this century no deaths from starvation due to failure of the rains have occurred; food is readily supplied to the afflicted districts; the problem is no longer one of 'life and death' but of the distribution of work and of relief. Perhaps the most notable achievement of the Government of India is its conquest of the cruel spectre of famine. (See also Chap. XI.)

Misapprehensions with regard to the nature and size of the 'Drain' can best be dispelled by examining, first, the balance of trade and, secondly, the 'Home Charges'. But first it must be stated categorically that India pays nothing that can by any stretch of imagination be called a 'tribute' to Great Britain.

It is true that India's exports of merchandise and specie normally greatly exceed her imports, but it cannot therefore be assumed that she receives nothing in return. Part of the excess of exports is counterbalanced by definite commercial services (such as shipping, insurance and various other financial services) which arise out of private commercial transactions. Another large part of the excess consists of interest payable on foreign capital invested in India. Without such investments India could not have been provided with her present material equipment. A country poor in capital, but offering prospects of its profitable use, gains by borrowing from abroad, even if it has to pay interest.

The remaining important item accounting for India's excess of exports is the 'Home Charges'. The table on page 263 gives the figures for 1929-30.

By far the most important single item is the interest on debt. All the other items (except payments for stores, which entail equivalent imports of merchandise) come

HOME CHARGES

	£	£
Interest on Debt: Railway . . .	8,962,265	
'Ordinary' .	3,423,095	
Total		12,385,360
Payments on Account of Civil Departments in India, and Contribution to League of Nations . . .		137,180
Expenses of the India Office and High Commissioner's Office		505,688
Stores (Civil and Military)		2,646,254
Army, R.A F, and Marine Effective Charges (including Furlough)		4,164,741
Superannuation (Civil and Military) and Civil Furlough .		5,925,031
Total		25,764,254
Deductions (i.e. receipts in England) . . .		597,523
Net Total . . .		£25,166,731

under the broad heading of payments for civil and military services received. The value of such services can only be subjectively determined, and a difference of opinion will probably always exist on this score. But is it generally realized that in 1921 there were only some 163,918 British in the whole of India, including 60,000 British troops and about 45,000 women? Out of nearly one and a half million persons employed in all branches of the civil administration in British India only 12,000 were British, and this included many railway employees and others in subordinate positions. Only 3,500 British are employed in the superior grades of the various Civil Services.[1] Even if all the nationalist claims with regard to the loss from the official employment of aliens were granted, it is clear that the extent of the evil has been grossly exaggerated. It is negligible in comparison with other causes of poverty.

The nationalist case for the 'Drain', therefore, stands or falls primarily by the question of debt charges.

[1] *Report of the Indian Statutory Commission* (1930), Cmd. 3568, vol. i, pp. 46, 47.

India's total debt, in India and in England, can be divided into two parts: (*a*) productive, and (*b*) ordinary. About 80 per cent. of the total debt is productive, that is, it consists of loans utilized for productive purposes, chiefly the construction of irrigation works and railways. (See Chaps. XII and XIII.) But interest payable on 'productive debt' constitutes no burden on Indian revenues, as the commercial services earn more than has to be paid in interest, to say nothing of the incalculable benefits they have rendered to Indian production and trade. Only the ordinary or unproductive debt is 'dead-weight debt'.

This latter is exceptionally small, both absolutely and per head of population, in comparison with that of most countries. That incurred (mainly on account of wars and the Mutiny) during the nineteenth century was reduced to very small proportions by 1914 and would have shortly been repaid entirely had it not been for the war. India's war-gifts of £150 million sterling to Great Britain, and other war expenditure, increased the unproductive debt of the Central Government to 2,610 million rupees in 1922 (the peak), but it had been decreased to 1,760 million rupees in 1930 (£132 million sterling or 642 million dollars). India is, therefore, exceptionally well placed as regards dead-weight debt.[1]

Unfortunately the sterling debt, with which we are here specifically concerned, cannot be similarly divided into two parts. Some loans are raised in England, and entered under the misleading heading 'Ordinary Debt', but are used in India for productive purposes. It is therefore erroneous to assume that the whole of the £3,423,095 given in the table above as interest on 'Ordinary' debt is interest on dead-weight debt. The conclusion

[1] D. L. Dubey, *The Indian Public Debt* (1930), pp. 13, 23, 180.

is that the payments on account of dead-weight debt do not constitute a formidable burden.

Misconceptions are also current with regard to the financial policy of the Government, assertions having been made that oppressive taxation of the poor has been introduced and increased. Actually the items of revenue most disliked (i.e. land revenue and the salt tax) were inherited from Mogul times. The rate of land revenue assessment has been progressively lowered, and although the salt tax has fluctuated, it now stands, since 1924, at $1\frac{1}{4}$ rupee (*1s. 8d.*) only per unit of $82\frac{2}{7}$ lb. It is unfortunate to have to tax the poor in India at all, but the problem of obtaining sufficient revenue has been extremely difficult, whilst the new forms of expenditure have in many cases improved the position of the poor. Taxation per head is very low in comparison with most other countries, whilst the burden on the poorer classes has been reduced by the development of sources of revenue such as customs, commercial services, and the income-tax.

Perhaps the greatest misapprehensions of all arise from ignoring the constructive economic work of the Government, and the improved policy adopted since 1900.

The part played by the Government as an economic pioneer, especially in the sphere of public works, deserves greater recognition. Some 28 million acres are now irrigated by Government works, 42,000 miles of railways have been constructed, and the famine problem has been transformed.

The recent improvement in the prosperity of the masses indicated in the first part of this chapter was partly due to the change in economic policy initiated under Lord Curzon, and greatly extended since. The promotion of scientific agriculture, stimulation of co-operation, grant of assistance to industry, improvements in sanitation,

advances in medical research, and extension of industrial legislation have all played their part. The extensive and fruitful investigations into every sphere of economic life, the grant of fiscal autonomy, and adoption of 'discriminating protection', and last, but not least, the Whitley Commission, all reveal the attitude adopted by the Government and the interest now taken in economic matters.

The results have been a vast increase in total production and trade since the introduction of British rule, and a definite though unfortunately small improvement in the position of the masses.

There have been certain regrettable features, such as the decline in the indigenous industries, and mistakes in policy from time to time, some of which have been freely recognized,[1] but the fact remains that India is now better equipped for future economic progress than ever before, and that some improvement in the standard of life has been achieved.

Why then, it may be asked, has not prosperity increased more rapidly? What accounts for the continuance of dire poverty? What are the chief obstacles to more rapid improvement?

My conclusion is that—apart from environmental factors (such as the climate, and the prevalence of epidemic and endemic diseases)—the primary causes of India's poverty are to be found in spheres other than the purely economic, the outstanding factors being the population problem and the influence of social stratification, institutions, and customs upon economic life.

The importance of the population problem has long been recognized in certain quarters and is frequently

[1] A striking example of the reversal of mistaken policy was the repeal of the hated countervailing cotton excise in 1926. On this question see Chapter XVII, p. 283.

emphasized by Indian economists, but tends to be overlooked, or at least not mentioned, by nationalist critics of British rule.

India is still at the stage characterized by extremely high birth- and death-rates. The statistical expectation of life in India is only 25 years, as compared with 54 in Great Britain.[1] At this stage an increase in total productivity tends to result, not in an appreciable improvement in the standard of life, but in the maintenance of a larger population at the old, or at an only slightly improved standard. This is what has happened in India in the past.[2] India is over-populated in the sense that under present conditions a smaller population could almost certainly produce more per head. The size of the population is still mainly regulated by Malthus's 'positive' checks i.e. misery and vice, as shown by the high infant and maternal mortality rates, by the prevalence of ill health, and by the fairly common sterility due to the prevalence of venereal disease. As long as this state of affairs continues, it is hard to see how any substantial and rapid improvement in the standard of life of the masses can be effected.

The influence of social stratification (especially the caste system) and of a number of other social customs and institutions on economic life are fundamental and far-reaching. These social factors affect the mental outlook, diet, choice of occupations, and methods of work of the people. The sacred cow, an undue regard for mere life as opposed to good life,[3] and lavish expenditure upon ceremonies

[1] See *Report of the Royal Commission on Labour in India* (1931), p. 250.

[2] Striking examples of this tendency are to be found in the canal colonies of the Punjab, where small numbers and great individual prosperity are already giving way to larger numbers and less individual prosperity, and in the fact that a low land revenue assessment tends to be followed by an increase in population, which neutralizes the potential increase in prosperity.

[3] It has been calculated that the depredations of rats cost India about

cause vast economic waste. Social stratification is still a severe brake on economic mobility, and a great bar to progress.

The position of women, particularly as embodied in the infant marriage and the *purda* systems, is also a serious drawback, especially through its influence on health and education.[1] Great efforts are being made at amelioration and reform, but progress is slow.

Whilst little or nothing is done to remedy these major underlying causes of poverty, minor modifications of economic policy—such as the imposition of a new protective tariff, the establishment of a Reserve Bank, or the grant of a subsidy to a new industry—appear a mere tinkering at the problem.

600 million rupees per annum (more than military defence), and that the annual loss involved by the maintenance of old and defective cattle amounts to 1,760 million rupees (four times the income from land revenue).

[1] See *The Key of Progress* (1930), ed. A R Caton.

Chapter XVII

TRADE AND INDUSTRY

By SIR DAVID CHADWICK, C.S.I., C.I.E.

[Sir David Chadwick joined the Indian Civil Service in Madras in 1900 and was appointed Director of Agriculture in 1912. During the War he was selected for special trade inquiries on behalf of the Government of India, going on special duty to Russia, France, and Italy. He was the first Indian Trade Commissioner in Great Britain, and returned to India in 1922 to be Secretary to the Government of India in the Commerce Department. He served for a time as Commerce Member of the Government of India.]

IN the time of Akbar, the great Mogul Emperor, a contemporary of Queen Elizabeth, one moderate-sized modern cargo ship of 5,000 tons gross sailing once a month would have been sufficient to carry the whole of India's sea-borne trade. In 1930, ships exceeding 8 million tons gross cleared with cargo from ports in India; also in that year another million tons of shipping left Burmese ports.

When the sea route between Europe and India was being developed in the sixteenth and earlier seventeenth centuries, the chief articles sought by European merchant adventurers in exchange for silver, metals, and European novelties were pepper and spices. Purchas begins his narrative of the first voyage from London thus: 'The merchants of London, in the year of our Lord 1600, joined together and made a stock of seventy-two thousand pounds, to be employed in ships and merchandises, for the discovery of a trade in the East India, to bring into the realm spices and other commodities.' Spices, chiefly pepper, required for seasoning meat to be stored for consumption in the winter months were the great lure. These, fortunately, were to be found near the coast, for inland transport was both hazardous and expensive. Metalled roads, of course, there

were none. Pack animals, mostly oxen, were the chief means of land transport. In the southern part of the peninsula wheeled vehicles were unknown. The rivers, even in the north, were indifferent arteries for traffic owing to their constantly changing depths. Security on travel was very variable. Exactions such as 'transit dues were such an ordinary feature of the period as to be scarcely worth mentioning in the narrative of travellers designed to show the peculiarities of Indian life'. The picture of Indian commerce which travellers' accounts in those centuries portray, is one of very restricted trade; of goods filtering irregularly from the interior to the small ports; of spices grown near the coast forming the most regular article of trade with Europe; of textiles important in trade with the Far East and Arabian and African ports; of silver[1] and metals prominent among imports; of communities inland so indifferently connected that a bounteous harvest in one part of the country was not available to succour those suffering from a failure in another.

India to-day, after the United States, is the largest country in the world enjoying internal free trade: three hundred and fifty million people live in an area of two million square miles of contiguous country with a continuous coast-line. Except for a few customs duties on certain goods entering some of the Indian States, no internal trade barriers hamper the flow of goods from the Khyber to Cape Comorin, from the borders of Persia to those of China and Siam. The route mileage of the railways approaches 42,000 miles, and in the last decade motor omnibus services have notably increased. Internal security and improvement in communications have together

[1] William Hawkins after two years stay at the Mogul Court wrote that 'India is rich in silver, for all nations bring coin and carry away commodities for the same; and this coin is buried in India and goeth not forth'.

OVERSEAS TRADE
OF BRITISH INDIA
1864-1929
FIVE YEAR AVERAGES
Millions of rupees
6000
5000
4000
3000
2000
1000
TOTAL MERCHANDISE
EXPORTS
IMPORTS
NET IMPORTS OF GOLD AND SILVER
1864-69
69-74
74-79
79-84
84-89
89-94
94-99
99-04
04-09
09-14
14-19
19-24
1924-29

rendered India immune from the direst effects of famines and revolutionized her external trade. Pepper and spices now form a trivial incident among Indian exports, which consist of great staple commodities in demand the whole world over. The precious metals, silver and gold, are still a prominent feature in India's import trade, but are far exceeded in value by imports of merchandise (see diagram on p. 271). To-day, judged by the value of external trade, India is surpassed by only five countries, the United States, the United Kingdom, Germany, France, and Canada. Her industrial factory development is such that she has been given representation on the Council of the International Labour Office at Geneva as one of the eight chief industrial countries of the world.

The contrast between these two sketches of the trade of India in the early seventeenth and twentieth centuries is striking. The changes they show are still more remarkable when the diversities of race, of language, of religion, of social outlook and intercourse which have always characterized and still do characterize India are remembered. In two out of these three centuries—the seventeenth and the eighteenth—India was in constant turmoil between one prince and another, between one race and another. The British occupation in the nineteenth century changed all that. Then only was that high degree of unity in administration and of uniformity in commercial law and usage achieved which rendered general economic development possible. The era when India was 'the richest country in the world' (if it ever existed) had passed long before the adventurous sailors of western Europe found the sea route to the East. The assertion that to-day India is the 'poorest country in the world' is a mere rhetorical disservice to a country which in the last century has made extraordinary progress in the face of internal difficulties,

both social and natural, such as Western countries have not experienced.

How recent and rapid has been the growth of Indian trade can easily be illustrated. In 1929 the imports into India of motor vehicles alone exceeded in value the total value of all imports of all merchandise (except gold and silver) less than a century before (1834). In 1929, as in 1834, and in Akbar's time, India was an importer of the precious metals; but whereas in Akbar's time these imports amounted to what would be a small figure, they were £1¾ millions in 1834 and exceeded £19 millions in 1929. The first of the Bombay cotton mills was started in 1851. Less than eighty years later, in 1930, over 850 million pounds of cotton yarn were spun and over 2,500 million yards of cotton cloth were woven in Indian mills. In 1853 at Bombay the first railway was opened; and without a railway system no rapid progress in the country was possible. The great economic changes which have placed India among the chief trading and industrial countries of the world have occurred in the last eighty years, corresponding with the period during which the Government of India has been directly under the British Crown—since 1858.

These same eighty years have witnessed the rapid economic rise of other countries in the world, as, for instance, of the United States and of Canada. In the light of their advance the progress of India might seem ordinary, but such an inference would be incorrect. The natural resources of North America far exceeded those of India in diversity and opportunity. In the north of America, large areas of virgin fertile land were available for new cultivation, vast mineral deposits awaited discovery and exploitation, and the people, whether descendants of earlier settlers or immigrants, were familiar with industrial processes and possessed the pioneers' eagerness. In India it was far

otherwise. The most fertile parts of the country were already occupied. Increased productivity depended on the construction and improvement of vast irrigation works or on the cheapening of transport so as to render profitable the cultivation of soil naturally poor. India's mineral resources were limited and undeveloped. Instead of a young people eager to discover the possibilities of virgin territory, there was an old-established people tied to their home villages and ancestral occupations by numerous social, linguistic, and religious bonds.

India's economic opportunity in the latter half of the nineteenth century, unlike that of North America, was not due to the richness of its untouched lands and to the pioneering spirit of its people. It came in a different way. The development of invention and industry in the West after the 'fifties of last century increased beyond imagination the world's ability to utilize (and, therefore, the world's need for) tropical agricultural produce. Among tropical countries, the one in which conditions favoured trade on a large scale was clearly the best placed to profit by this new demand. As it happened, that country was India; but if India, alone among tropical countries, presented at the moment of opportunity the settled, peaceful, and open conditions essential to large-scale trade, she owed her good fortune largely to the fact that before this new demand had materialized, the British in face of the prevailing internal disorder had already assumed responsibility for the general administration of the country. The results were cumulative. Settled conditions enabled the opportunities of increased trade to be seized, whilst the increase in population provided an expanding market for many of the products of Western invention. On this firm basis of mutually advantageous exchange, India's trade has steadily grown.

This exchange—in the main an exchange of agricultural products for manufactured goods—was not brought about as the result of deliberate policy, but was the inevitable outcome of economic need and opportunity. Its broad result is notable. Between 1872 and 1931, the dates of the first and latest census, the population of India has increased by 144 millions. Just under 59 millions of this enormous figure may be ascribed to areas missed in the first census and to subsequent improvements in the methods of enumeration, leaving a true increase of 85 millions in the last sixty years. In the same sixty years, 1870 to 1930, the population of the United States has increased by 84 millions. The totals are strictly comparable; but, whereas 8 millions of the increase in the United States were due to the influx of foreign-born immigrants, there was no such factor in the case of India. The economic progress of India in those sixty years has not only enabled her to support a vastly increased population; it has done something much greater. It has enabled this increased population to attain an improved standard of living. (See Chap. XVI.) The consumption of wheat and cotton clothing per head of population has increased. Dwellers in inland towns and villages have been enabled to enjoy the advantages of rail and road transport, the convenience of the sewing machine, and the amusement of the cinema.

Though geographically part of a great continent, India is economically a sea-girt island. Though a motor road and a railway now traverse the Khyber Pass to within a few miles of the Afghan border, land-frontier trade is still carried on camels and pack animals; and in volume and value is insignificant in comparison with the sea-borne trade. The export trade of India, like that of her partner Great Britain, depends solely on the safety of sea communications. If India in the period of her rapid economic

development had to be associated with some other country, it has certainly been to her an advantage to be associated with the one great country to which sea communications were vital, a country which had commercial and diplomatic connexions with every other country, and whose articles of export were almost entirely complementary to, and not competitive, with her own. The exports of India, like those of Great Britain, go to practically every country in the world.

This far-flung destination of exports gives an element of stability to India's export trade by providing alternative markets for much of her produce. Greater stability is derived from the diversity and nature of the articles exported. India's general export trade does not depend on the market position of one or two commodities. For instance, 60 per cent. of Australian exports consist of two commodities—wool and wheat; 70 per cent. of those of South Africa of two—gold and wool; three-quarters of those of New Zealand of two—wool and mutton; even in Canada, wheat constitutes nearly 40 per cent. of the value of the export trade. In India raw cotton contributes the largest single share—20 per cent.—to the export trade. The chief articles exported are cotton, raw and manufactured; jute, raw and manufactured; oilseeds, mostly groundnuts, linseed, sesamum; grains, mostly rice; tea; leather; hides and skins; lac; wool; oilcakes; pig iron; manganese. None of these are luxuries. They are staple products essential for human food or for industry. In a world-wide depression like the present, India's export trade suffers, just as that of other countries; but owing to the nature of the commodities exported, to their diversity and to their wide distribution, the general reaction of difficulties in any particular trade or market is mitigated. India's modern export trade is marked by great

stability. During the last sixty years, this export trade has increased almost uninterruptedly; since the war, for world reasons, fluctuations have been more marked than previously, but the elements of stability remain unimpaired.

Over half the imports into India consists of cotton piece goods, iron and steel goods, treasure (gold and silver), machinery, sugar, mineral oils, and chemicals and dyes. Other important imports are electrical goods, glass, woollens, silks, oilman's stores, raw cotton, railway engines, and paper.

The growth in value of India's export and import trade is shown in the diagram on p. 271. The excess of exports over imports is important. It is this excess which enables India, still, as ever, to import and retain relatively large quantities of the precious metals (gold and silver), and to meet the charges on capital loans raised abroad. For, in spite of the constant absorption of the precious metals, capital has in the past been difficult to obtain locally (see also p. 251).

This record is sometimes criticized on the ground that it represents an exchange of the materials for industry for the products of industry, and therefore indicates progressive economic retrogression instead of economic advance. Not only is such a deduction contrary to the obvious conditions in India, but in many admittedly progressive countries exports of foodstuffs and raw materials exceed in value the exports of local manufacture, and none bemoan that fact as evidence of national poverty. The criticism, however, goes further astray. It ignores the fact, that in India itself, although the total value of exports has increased rapidly in recent years, as shown in the diagram, the value of the exports of manufactured goods has increased still more rapidly. Thus:—

Proportion of value of articles wholly or partly manufactured in India and exported to total value of exports.

1904	17 per cent.	1919–24 (average)	27 per cent.
1909–13 (average)	23 ,, ,,	1929	27 ,, ,,
1914–18 (war-period)	22 ,, ,,	1930	26 ,, ,,

Among the chief articles of import only one foodstuff appears—sugar. Although India is the second largest producer of sugar in the world, it is also one of the largest importers. Except for this article India is self-supporting in the matter of food. Large as is the export of many agricultural products from India (tea and linseed alone are grown primarily for export), the first care of production is the satisfaction of the local demand. The internal market is very much greater than the market overseas. The abolition of internal trade barriers, and the improvements in communications have enormously increased internal trade; but it is capable of much further development by improvements in banking, by more facilities for storage, by still better internal communications, by more uniform commercial practice, and by better organization in reducing the number of dealers through whose hands goods pass.

In industry also the first care is to supply the home market. Only the jute industry and to a much lesser extent the leather industry cater primarily for export. In spite of the mechanical developments of the last century handicrafts still continue. To-day the weaver, the potter, the carpenter, and the dyer are to be found in most Indian villages. In certain centres specialized handicrafts are carried on, as for instance, ivory carving, the making of lacquer goods, the hand-printing of cotton cloths, the making of rugs, carpets, and embroidery, the working of brass utensils. The output of these traditional but unorganized crafts cannot be estimated, but it is very large, and some of the

work reaches a high degree of artistic elegance. The most part is made to meet local demand and is very variable in quality and durability. These hand-workers, working in their homes or in small groups, often without much capital and with simple though frequently efficient appliances, have for centuries formed a most important part in Indian life. To-day, as in the Middle Ages, the finest specimens of their skill command the admiration of Western countries. But hereditary skill and primitive traditions cannot place at the disposal of mankind the large quantities of consumable goods of uniform standard obtainable from power factories.

Power industries are in no way indigenous and have been chiefly introduced during the last thirty years. Although the first cotton mill near Bombay was started in 1851 and the first jute mill near Calcutta in 1834, the extension of factories beyond these two industries and these two towns was, throughout last century, slow. The difficulties to be encountered were serious. Local labour had to be trained; coal had to be imported and the immediately accessible local market was soon supplied. The railways have always been great consumers of coal; but, as late as 1884, wood was still burnt in many of the engines and of the coal used over 30 per cent. was imported. The chief factory developments in India belong to the present century. In 1893, only 715 factories came within the inspection laid down by the Factory Acts. In 1929, the number exceeded 7,000. Whereas in 1880 there were 22 jute mills employing 27,000 people, the number had risen in 1928 to 91 mills employing 339,000 people. The average exports of jute cloth in the three years 1928 to 1930 were three times as great as in the beginning of the century. In the first five years of the present century, the average annual mill production of cotton piece goods was

under 500 million yards. In the last five years it has averaged 2,300 million yards. This increase has not, however, been gained at the expense of the hand-loom weavers; for it is calculated that between the same periods the annual average output of handwoven cloth has increased from 850 to 1,300 million yards. On the other hand, imports have fallen by 300 million yards. The consumption of piece goods per head of population has in fact increased by over 35 per cent.—itself an evidence of a general rise in the standard of living in the country.

The outstanding facts are the comparative novelty of industrialism in India and the rapidity of its growth. More remarkable than the development of these two older industries in Bombay and Calcutta has been the erection of factories inland and the speed with which newer industrial undertakings—such as modern mining operations, railway, and dockyard work, the manufacture of iron and steel, paper, cement, matches, the installation of electrical undertakings—have developed during the last three decades. Indian industrial production has attained a diversity, a distribution, and a volume never before known.

With minerals the story is the same. In the distribution of its mineral wealth India has not been kindly treated. An excessive proportion is concentrated in one area, some 150 to 300 miles west of Calcutta. There, fortunately, deposits of coal, iron, limestone, copper, and manganese are in fair proximity. The chief mica deposits are in the vicinity of this tract. Elsewhere mineral deposits are rare and widely separated, such as gold in Mysore, lead, zinc, and silver on the northern confines of Burma, tin and wolfram in the extreme south of Burma, monazite sand on the Travancore coast, magnesite in Madras, salt in the arid portions of Rajputana, oil in Burma and on the North-

West Frontier. Salt had been worked for an unknown period before the time of Akbar, but proper mining methods were only introduced in 1872 on the advice of an officer of the Geological Survey of India. It is due very largely to the work of officers of this Department that the mineral deposits just enumerated and others have been discovered. That work has all been done in the last sixty years. Since 1900 the annual value of the raisings of minerals for industry (excluding gold) has increased twelvefold. All of them, except mica, manganese, lead, and zinc, are primarily mined for local use in the country and not for export—an indication both of increasing industrial activity and of the increasing adoption of modern industrial technique.

The iron and steel industry deserves special mention. The principle of iron metallurgy was known in ancient India; even steel was made in the villages in small clay crucibles. Sporadic attempts to manufacture iron on a large scale were made from 1777 onwards, but success did not arrive till a century later. India owes its modern steel industry to a Bombay merchant of courage, vision, and determination—Mr. Jamsetji Tata. Under his sons the Tata Iron and Steel Company was formed. The first blast furnaces were started in 1911, and in 1929 the output of rolled steel approached 500,000 tons. This development of a local steel industry has given general satisfaction, as opening the way for subsidiary industries, such as those of tin-plate, agricultural implements, etc.

Modern industrial developments require capital. In the first instance, but not invariably, the pioneer effort has been provided by British enterprise and British capital. The development of the cotton industry, especially in Bombay and Ahmadnagar, is the outstanding example of local Indian effort. The jute industry, on the other

hand, has been developed almost entirely, and is still controlled, by Scotsmen. The first efforts in iron, paper, cement, mining, electricity, were all due to British enterprise; and British interests in many of these industries are to-day very considerable, often preponderant. It was always difficult to obtain capital locally for a new industrial enterprise, but this has been markedly less so since 1915. Many companies in the last thirty years have been launched successfully under Indian management with Indian capital. In addition, the proportion of Indian shareholders in British-managed local industries (for example, in jute and tea) has very greatly increased. This abatement of the ingrained fear of using capital in industrial ventures contains the promise of future industrial progress, and incidentally controverts the assertion that India has become increasingly poorer.

In the case of shipping, the desire to hasten has led to unofficial proposals aimed at excluding British enterprise from the coastal trade which it has developed on modern lines. In olden days small wooden craft journeyed along the coast and sailed the Indian Ocean. In subsequent centuries efficient wooden ships were built in Bombay. But when sail gave way to steam and wood to iron, locally-made craft could no longer compete on long voyages. Gradually a regular coasting service, running to time-tables between ports, and closely associated with overseas sailings has been built up by British commercial enterprise. Indian-managed companies have lately and naturally sought to enter this field, but have found competition difficult. Hence has arisen the suggestion that by political means the control of the coastal services should be progressively transferred from British to Indian hands. This suggestion cannot but embarrass the relations between two commercial communities through whose co-operation

in the past India has advanced economically, and in whose co-operation the promise of further rapid advance lies.

The tariff policy of the Government of India—like the tariff policies of all governments—has been criticized as unfavourable at times to local industry. Stress is usually laid on three points—the prohibition of the import of Indian printed calicoes into England for some years subsequent to 1721; the imposition in 1894 of an excise duty on mill-made cotton cloth in India, at a rate equal to the $3\frac{1}{2}$ per cent. import duty; and in recent years insufficient protective duties. As for the first of these, England at that time was in no way responsible for India's progress (Clive first sailed to India twenty-two years later). As for the second, it was in accord with the strictest tenets of free trade, and was a means whereby necessary revenue could be raised whilst keeping the import duty on imported cloth at a low level and thus mitigating the rise in its retail price. Whilst theoretically justifiable, its imposition caused great dissatisfaction. In 1916 the import duties were raised above the excise duty, and in 1926 the excise duty was entirely abolished. As regards the third point, the encouragement of industry by tariff measures has been the policy of the Government of India since 1923. But the interests of the mass of consumers in India must also be considered, and protection is only given after strict inquiry by a Tariff Board. By 1930 protective duties had been imposed on imports, whatever their country of origin, of rolled and structural steel, iron bars, tin-plates, cotton piece goods, printing- and writing-paper, and matches.

This is not the record of a country growing progressively poorer, constantly thwarted economically. It is a record of steady economic advance. The steadiness is surprising in the light of the special economic difficulties which have

confronted Indian administration and commerce. These have included the occurrence of famine, the difficulty of changing from a silver to a gold exchange basis of currency, the lack of a common language, and the difficulty of attracting capital to industry.

Was, however, that progress inevitable, and would it have been greater had the fortunes of India and England never become linked? Behind all this record of advancing trade and modern industrial beginnings lies the great work of civil administration which rendered it possible—the administration of justice; the enactment and administration of uniform laws on commercial matters such as contracts, companies, negotiable instruments, shipping, life insurance, factories, mines, and so forth; the opening of communications and the creation of ports; and the maintenance of external credit. That India would have in equal measure supplied unaided all that these imply is hardly conceivable. It is contrary to the history in the nineteenth century of every other tropical or Eastern country, except Japan, and nothing in the internal condition of India between the fifteenth and eighteenth centuries rendered unity, except through foreign intervention, probable. Herein the history of Japan is in marked contrast. Japan, a homogeneous close-knit country, enjoyed a strong centralized indigenous administration which facilitated its break with the past and the adoption of Western methods. India was not so unified, and with its diverse languages and religions and principalities had no prospect of like indigenous leadership.

Political discontent feeds on economic difficulty. Like farmers everywhere, cultivators in India are suffering to-day from the disastrous fall in agricultural prices. In June 1931, the wholesale prices in Calcutta of cereals, pulses, jute, and cotton were only 74, 81, 45, and 87 per

cent. of those in July 1914. The demand for manufactured goods has contracted and industry is depressed. The fall in the price of silver has depreciated the value of the silver reserves of the people. The universal fall in prices affected first the primary producers of the world. In 1930 the total value of the overseas trade of India, like that of Canada and Japan, fell in value by 25 per cent.: that of Australia and the United States fell more. The vast majority of the people of India are agriculturists. Changes in value such as these affect the life of almost every village. In September 1931 the Government of India abandoned the gold standard, thereby checking the fall in rupee prices of Indian produce and causing the sale of gold to show a rupee profit. By January 31, 1932, over £30 millions sterling of gold—'a fraction of India's immeasurable store'—was exported, rendering further overseas borrowing unnecessary. Temporary relief has thus been gained, but India awaits a revival of trade as eagerly as other countries; meanwhile, efforts are being made to improve the quality of many of her articles of export.

The story of the trade and industry of India in the last eighty years—the period of its close association with the British Crown—has been one of almost uninterrupted advance, marked primarily by the attainment of a world-wide trade and in the present century by a determined effort to develop industry on modern lines. In both stages the British connexion has been vital. It rendered the first possible by the pacification, opening, and development of the country. It rendered the second possible by the accession of cheap capital, the force of example, and the creation of opportunity.

Peace, security, and opportunity are the foundations of economic welfare. These have been firm since 1858. Their value is most acutely felt when they are disturbed.

Chapter XVIII

LABOUR

By SIR ALEXANDER MURRAY, C.B.E.

[Sir Alexander Murray has occupied a prominent position in the business world of Calcutta during the last 20 years. He was Chairman of the Indian Jute Mills Association in 1913 and again from 1917 to 1919, and of the Indian Mining Association (1927). He was President in 1920 of the Associated Chambers of Commerce of India and Ceylon, and their representative in the Legislative Assembly in 1927. He went to Washington in 1919 and to Geneva in 1924 as delegate of Employers of Labour in India at International Labour Conferences. He served as a member of the Royal Commission on Indian Currency and Finance, 1925–6, and of the Royal Commission on Labour in India, 1929–31.]

LABOUR in India covers a wide field, and has many features that distinguish it from labour in other countries. An outstanding difference is the continual movement of workers between the country and the towns, and between agricultural and other industrial pursuits. Although essentially an agricultural country, India within recent years has made considerable progress in other directions.

The census of 1921 showed that 73 per cent. of the population were dependent on the production of raw materials for a livelihood, while industry supported 10½ per cent. and transport 1⅓ per cent. only. Of the 33 millions returned as sustained by industry, 15½ millions were described as actual workers and 17½ millions as dependants. These figures included workers employed in cottage and other unorganized industries, but not workers in mines and plantations. The industrial census of 1921 showed 2,681,000 persons employed in organized industries, including 821,000 on tea, coffee, rubber, and other plantations, 294,000 in mines and quarries, 773,000 in textiles

and allied industries, and 170,000 in metal industries. Corresponding figures from the 1931 census are not yet available.

From time to time committees and commissions have made inquiries and submitted reports on Indian labour conditions. The latest information may be found in the recently published report of the Royal Commission on Labour in India (Cmd. 3883; 1931). A reference to this report will be found at p. 257 in Chap. XVI.

Throughout the greater part of its history, organized industry in India has experienced a shortage of labour, and it is only within the last five years that the supply of labour in most industries has been in excess of the demand. The chief reason for the scarcity of labour in the past was the growth of Indian industry. To a large extent factories, mines, and even railways are the creations of the last generation. They employed conjointly about half a million persons in 1892 and about two and a half millions in 1929. Every year employers increased their demands, so that recruitment had to provide not merely for replacement but also for an appreciable addition. The factories were able to draw only on limited areas. Lack of adequate communications prevented an easy flow of labour, and lack of general contact with the cities was an even greater obstacle.

In 1919 there were only 3,523 factories with 1,171,000 workers subject to the Factories Act; by 1929 the number of factories had increased to 8,129 with 1,553,000 workers. The factory workers in India to a great extent depend on textiles for a livelihood, the mills, chiefly cotton and jute, with the gins and presses providing employment for 56 per cent. of the workers of the officially recognized factories. Twenty per cent. are employed in railway workshops and other engineering and metal establishments, leaving only

a quarter of the whole factory population for the remaining factories in British India. Bengal finds employment for more than one-third of the factory workers, and Bengal and Bombay together for 60 per cent., evidence of the predominant position of these two provinces in the factory life of India.

In the case of Indian States and the French Settlements, 1,183 large industrial establishments were enumerated in 1928, giving employment to 164,000 workers. Here again, as in British India, textile mills and cotton gins and presses provide employment for 55 per cent. of the workers, cotton alone requiring 78,000 for its mills, gins, and presses.

As regards minerals, in 1929 there were 1,732 mines in British India, with 270,000 workers, of whom 117,000 worked underground. Coal-mines alone numbered 548 with 166,000 workers, of whom 97,000 were underground workers. More labour is thus employed at the collieries than at all the rest of the mines; and if similar labour in the States is added, the total number employed in raising coal in India falls not far short of 180,000.

In the plantation areas, both in British India and the Indian States, 930,000 are employed on tea gardens, 92,000 in coffee estates, and 49,000 in rubber plantations. There are other small plantation crops, the chief being cinchona from which quinine is manufactured, but the number of workers employed thereon is comparatively small. Tea is by far the most important plantation crop in India. Assam is the largest producing province, with a daily average of 557,000 labourers—more than all the rest of the areas together.

So far details have been given only of labour employed in factories, mines, and plantations to the number of about three million workers. Reference also must be made to workers engaged in transport services. Exclusive

of staff employed on construction, there were 819,000 railway employees in India in 1930, more than half being on State-managed railways. Out of that total, 136,000 workers in railway workshops are classified as factory workers and included in the figures already given of workers falling within the scope of the Factories Acts, while 25,000 workers in railway collieries are likewise included in the mining figures already quoted.

There are certain classes of Indian seamen who sail freely to all parts of the world as deck, engine-room, or saloon crews. During the three years ending 1928–9, the average number of seamen engaged in Calcutta was 58,300 a year and in Bombay 34,600. Inland steam navigation also provides employment for large numbers of Indian seamen on the great rivers of Assam, Bengal, and Burma, where three important steamer companies require over 20,000 as crews. Dock labour, too, provides employment, chiefly casual, for many workers at the principal seaports. The demand is intermittent, and as the bulk of the labour is employed through stevedores or other contractors it is not easy to make a reliable estimate of the total number of workers who seek a livelihood at the docks. Tramways are to be found in the more important cities. The Calcutta and Bombay systems between them employ about 10,000 workers, but in other centres the numbers are small and there is little likelihood of expansion in face of the competition from motor-buses. Fifteen years ago there was hardly a bus service in India, but to-day the motor-bus is to be found wherever there is a road capable of carrying one. There are now over 60,000 miles of metalled road in British India, and it is probable this mileage will be steadily increased. Meantime the bus traffic is conducted largely by small owners, and the number of drivers and conductors employed is increasing rapidly.

Reference now may be made to one of the main differences between labour in India and labour in the West, namely, the mobility of Indian workers generally and the instability of industrial labour in particular.

Migration is no new feature of Indian life. Notwithstanding the attachment of the cultivator to his own plot of land and of the agricultural worker to his own village, there has been a long-continued stream of emigration from particular provinces not only to other parts of India proper, but across the sea to Burma, Ceylon, British Malaya, Mauritius, Africa, and as far as the Fiji islands and the West Indies. While no control is exercised over the movements of skilled labour, the emigration abroad of unskilled labour is now regulated wherever indentured, as, for instance, to Ceylon and British Malaya, where there is a steady demand for Indian labour for tea and rubber plantations. Over two and half million Indians are now resident outside India in other parts of the British Empire, of whom about a million are to be found in Ceylon and three-quarters of a million in Malaya. On the other hand, very few Indians settle outside the Empire, only about 100,000 in all. Emigrants to Ceylon and Malaya are nearly all from the Tamil-speaking districts on the east coast of Madras; and between 150,000 and 200,000 return annually to their homes, bringing not only savings but wider knowledge of the world and a higher standard of living. Within the borders of India and Burma, there is no restriction on the movement of labour, with the exception of assisted migration from certain provinces to eight districts in Assam where the rapid extension of tea plantations has made labour scarce.

The Royal Commission on Agriculture in India (Cmd. 3132; 1928) found no indication of any serious shortage of agricultural labour in any province except possibly in

Assam. The Royal Commission on Labour considered whether efforts should be directed to creating an industrial population divorced from the village; but held that the link with the village was a distinct asset, which should not be broken.

The movement of labour to the towns may be, as in the case of Bombay, largely a movement from rural to urban areas within the same province, or it may be, as in the case of the industrial towns in Bengal, definite migration from one province to another. Interprovincial migration may be periodic, i.e. due to seasonal demands for labour; or semi-permanent, i.e. when the inhabitants of one place earn their livelihood in another but maintain connexion with their own homes, to which they ultimately return; or it may be of a more permanent character, as in the case of Assam where the tea gardens and the cultivable waste-land in the valley of the Brahmaputra are the main attractions for the poorer classes of villagers in other provinces.

Although 80 per cent. of the inhabitants of Bombay City were born within the borders of the province, only 16 per cent. were actually born in the city. Bombay's mobile population is largely drawn from two neighbouring districts, consisting of people who own small pieces of land which are not sufficient to keep them. In other centres of the cotton industry the labour force is more stable; such as Ahmadabad, Sholapur, and Madras. In the jute-mill towns of Bengal, on the other hand, the great bulk of the population comes from other provinces.

The recent growth of industrial towns in India and the speed at which organized industry has developed have created problems of housing and public health in many industrial centres. Lack of suitable housing accommodation has compelled men to leave their women-folk and families in their village homes, while the bread-winners

work for their living in congested mill areas under conditions that often are far from healthy. In many places the disparity in the sex ratio is a disturbing feature that is due not merely to the influx of industrial workers, but also to the housing scarcity, causing clerks and other middle-class men to leave their families in the country and to lead lives open to great temptations. Many employers have provided housing accommodation of a comparatively high standard for the workers employed in their establishments; but, generally speaking, it cannot be denied that the scarcity of suitable dwelling-quarters near places of employment is a material factor in the instability of industrial labour.

Increasing legislative restrictions are rapidly reducing the number of children employed in industry, and lessening the inducements to parents to bring their families to industrial centres. Of the 1,520,000 workers in establishments subject to the Indian Factories Acts in 1928, only 16 per cent. were women and 3 per cent. children between 12 and 15 years of age. Almost half of the women and rather more than half of the children are employed in the jute and cotton mills, where the tendency is to reduce still further the number of children in particular. No child under 13 years of age may be employed in mines either above or below ground. In 1929, new regulations were made under which women must be entirely excluded from underground workings by the middle of 1939.

One of the problems still to be solved by employers generally in India is the recruitment and engagement of workers without the intervention of unsatisfactory intermediaries. Recruiters and contractors were necessary so long as raw and untrained labour had to be attracted for the commencement and expansion of organized industries. Within the last few years, however, there have been signs

that the supply of labour seeking employment is in excess of the demand in all industries with the exception of planting, and possibly in some mining areas and seasonal establishments. Recruiting agencies will undoubtedly continue to be required for the supply of labour to plantation areas in Assam and elsewhere; but the day ought not to be far distant when contract labour should be reduced to a minimum.

While the Government of India long ago devised schemes of unemployment relief applicable to the rural population in seasons of crop failures, it has not yet been found actually necessary to institute special measures for the assistance of unemployed industrial workers through the establishment of Labour Exchanges or otherwise. Nor has it been found practicable to introduce schemes of sickness or health insurance of any description. In India, hospitals, dispensaries, and medical treatment are provided mainly by the State. Many municipalities maintain medical institutions; and a great deal has been done by large employers for the provision of medical aid for their workers. Welfare schemes also have received considerable attention from a number of employers, and several child welfare centres have been established. On most tea estates, and in some of the larger industrial concerns, employers have voluntarily introduced maternity benefit schemes for their women workers; but, except in Bombay and the Central Provinces, where Acts of limited application have been passed, there is no legislation on the subject.

As already mentioned in Chapter XVII, India has direct representation on the Governing Body of the International Labour Office, and the measure of her acceptance of International Labour Conventions compares favourably with that of other nations. The first Indian Factories Act was passed in 1881 and amended in 1891. After

the inquiries of a Factory Labour Commission, a new Factories Act was passed in 1911 and continues in force, although radically amended in 1922 and subsequent years. It is applicable to all factories employing twenty or more persons; and power is given to Local Governments to extend its provisions to places employing as few as ten persons, when considered advisable. The Act prescribes daily as well as weekly limits to hours of work, and provides for rest intervals and weekly holidays. The hours of adult workers are limited to 11 daily and 60 weekly, and of children between the ages of 12 and 15 years to 6 daily. No woman or child can be employed before 5·30 a.m. or after 7 p.m. In 1929 the normal weekly hours were not above 48 in 2,164 factories; above 48 and not above 54 in 1,008 factories; and above 54 in 4,791 factories. About half the total number of factories under the Act may be considered 'seasonal', i.e. normally working for not more than half the days of the year, but they probably provide employment for only about 300,000, say one-fifth of the factory workers. Small unregulated factories may be found in different parts of the country; and cottage industries are common. In recent years, notwithstanding the expansion of the cotton-mill industry, hand-spinning and weaving of cotton provide employment for a great number of people, hand-loom weaving being the chief means of livelihood of many weavers all over India. At least two million hand-looms are in use; and according to the report of the Indian Tariff Board, published in 1927, fully one-fourth of the cotton cloth consumed in India is made on hand-looms.

The Indian Mines Act of 1923, which repealed the first Act of 1901, limits working hours above ground to 60 weekly and below ground to 54; prohibits the employment of children under 13 years of age either above or below ground; and provides for a weekly holiday. An

amending Act of 1928 provides that no mine shall be open for more than 12 hours in the 24, unless on a system of shifts which must not exceed 12 hours and must not overlap.

Since 1924 a Workmen's Compensation Act has been in force in India and, as amended in 1926 and 1929, covers about four million industrial workers engaged in all but the smallest factories, in mines, on railways and tramways, on certain types of building work, and in certain less important branches of employment.

In 1926 industrial legislation in India took a new turn with the passing of a Trade Unions Act. It differs from similar British legislation in the fact that the application of its provisions is confined to registered unions. Registration under the Act confers on trade unions and their members a measure of immunity from civil suits and criminal prosecutions. The necessity for registration and the legal obligation to furnish audited accounts and to include in the executive a majority of actual workers are proving irksome to labour leaders. At the end of 1929, only 87 unions had been registered with a membership of 183,000; of these, 38 with 90,000 members were registered in the Bombay Presidency.

The Bombay Government drafted in 1924 a Bill for introduction in the local Legislative Council to provide for the settlement of industrial disputes, but it was withheld at the instance of the Government of India who ultimately passed through the Central Legislature an all-India measure, viz., the Trade Disputes Act of 1929. Under this Act, disputes may be referred either to Courts of Inquiry or to Boards of Conciliation, and there are provisions rendering punishable by fine or imprisonment lightning strikes or lock-outs in certain public utility services. Other provisions aim at the prevention of general strikes.

Some reference may still be made to the standard of living of the workers. In the light of such material as is available, and after taking account of wage changes and price movements, the Royal Commission formed the opinion that by 1923 industrial workers were generally better off than before the war and that, at the time the report was written, the general level of real wages was probably higher than at any previous period. All the same, members of the Commission believe that, so far as unskilled workers are concerned, they cannot maintain families of average size on their income unless there is more than one wage-earner in the family. As regards the alleged inefficiency of Indian workers, it must be admitted that the Indian industrial worker produces less per unit than the worker in any other country claiming to rank as a leading industrial nation. This, too, in spite of the fact that all over India are to be found craftsmen and skilled artisans whose products compare favourably with those of similar workers in other countries. It is when he is brought into organized industry, and, in particular, mechanized industry, where discipline and sustained application are necessary, that the average Indian worker suffers in comparison with industrial workers elsewhere. How far this lower level of efficiency is due to poverty, and how far the poverty of the Indian worker is due to his inefficiency, are matters for those engaged in different industries to solve for themselves. But unless a solution is reached and India's industries generally are raised to a higher level of efficiency, it is doubtful whether they can continue to expand in face of the present-day keen competition from rationalized industries in other countries. Yet expand they must, if the population continues to increase as it has done in the past decade, which has seen an addition of 32½ millions or 10 per cent. to India's already teeming millions.

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